EBN Technology Corp.

Service Manual

Solid POS 70 Series

*POS-7012EG-370

*POS-7015EG-370

March 2007

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1 Chapter 1 : Troubleshooting

1.1 Symptoms and Solutions

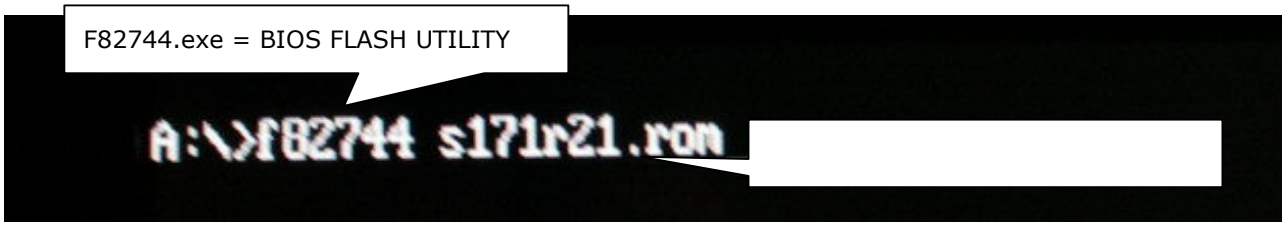
Error Code	Symptom	Check Points	Detail Steps
1001	NO BOOT with Power On	1.RAM 2.CPU 3.MB(2.3.1)	1. Check LED Light (Upper Left) should be on 2. If yes to item 1, open upper case, check if RAM well plugged on the memory slot 3. Check golden finger cleanness, if not clean, use pencil eraser to clean golden finger 4. If still fail, replace with another RAM for testing 5. If fail, replace with another CPU for testing 6. If fail, replace with another mother board for testing 7. If fail, RMA system to EBN
1002	NO POWER	1. Power cord 2. Power button board (2.3.5) 3. Power button cable(2.3.7.8) 4. MB (2.3.1) 5.Power Supply(2.2.3)	1. Check Power Cord is well plugged or not 2. If yes to item 1, open upper case, check if power button damaged, if yes, replace with another power button board (POS 75) or replace with another MB(POS 72) 3. If power button not damaged, check if power button cable to MB well plugged. 4. If fail, replace with another power button cable 5. If fail, replace with another MB(POS 75) for testing 6. If fail, replace with another power supply for testing 7. If fail, System RMA to EBN
1003	System HANG Up	1.RAM 2.CPU 3.MB(2.3.1)	1. Check golden finger cleanness, if not clean, use pencil eraser to clean golden finger 2. If still fail, replace with another RAM for testing 3. If fail, replace with another CPU for testing 4. If fail, replace with another mother board for testing 5. If fail, System RMA to EBN
1004	LCD Blank	1.Bridge Board to LCD Cable(2.3.7.9) 2.Bridge Board (2.3.2) 3.MB(2.3.1)	1. Shut Down Power 2. Open upper case, check cable between bridge board and LCD well connected or not. Replace with another LCD cable for testing 3. If fail, replace with another bridge board 4. If fail, replace with another mother board 5. If fail, System RMA to EBN

Error Code	Symptom	Check Points	Detail Steps
1005	LCD Turn Black	1. Inverter to LCD cable, 2. Inverter to MB cable, (2.3.7.1) 3. Inverter board 4. MB(2.3.1) 5. LCD(2.1.3)	1. Shut down power 2. Open upper case, check cable between inverter and LCD well connected or not. 4. If fail, check cable between inverter and mother board well connected or not. Replace with another inverter and MB cable for testing 5. If fail, replace with another inverter board for testing 6. If fail, replace with another mother board for testing 7. If fail, System RMA to EBN
1006	HDD Unstable	1. HDD (2.5.2) 2. HDD Cable (2.3.7.5) 3. MB(2.3.1)	1. Shut down power 2. Open HDD Cover, check HDD 80pin cable and HDD power cable well connected or not 3. If fail, replace with another HDD for testing 4. If fail, open upper case, check cable between HDD and Mother board well connected or not 5. If fail, replace with another mother board for testing 6. If fail, system RMA to EBN
1007	Error Message: CMOS checksum error	1. On Board Battery(2.3.6) 2. MB(2.3.1)	1. Shut down power 2. Open upper case, check on board battery well connected / damage or not 3. If fail, replace with another battery 4. If fail, replace with another mother board 5. If fail, system RMA to EBN
1008	Touch Fail	1. Driver (NA) 2. Control board to MB cable (2.3.7.2) 3.Touch control board(2.3.4) 4.MB(2.3.1) 5.Touch panel(2.1.2)	1. Reinstall touch driver, working mode select "PnP" 2. If fail, shut down power 3. Open upper case, check if cable between touch panel and touch control board well connected.(Replace the cable with touch panel at item 10) 4. If fail, check if cable between touch control board and MB well connected. Replace with another touch control board to MB cable 5. Check if switch (# 3) on touch control board at "On" position 6. If fail, check M/B JP10 jumper setting to 2-3 7. If fail, replace with another touch control board 8. If fail, replace with another M/B for testing 9. Replace with another touch panel for testing 10. RMA system to EBN

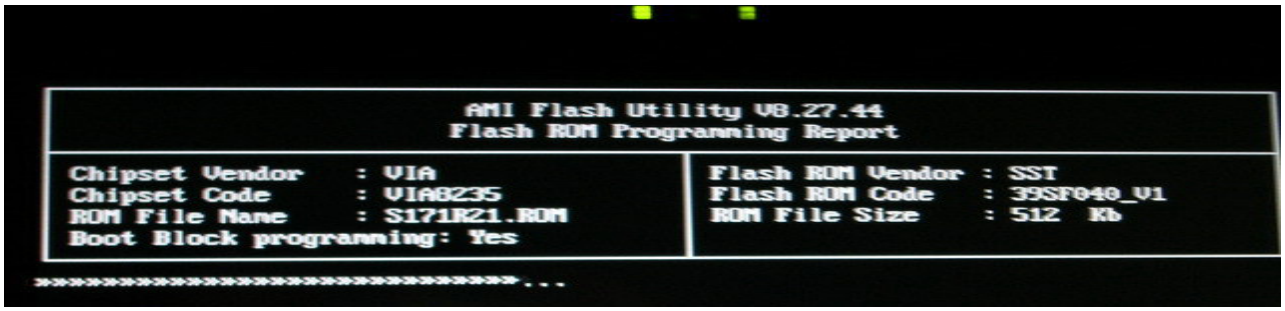
Error Code	Symptom	Check Points	Detail Steps
1009	Boot Up K/B Malfunction	1.100PIN Cable 2.MB(2.3.1)	1. Shut down power 2. Check keyboard cable connection 3. If fail, replace with another keyboard for testing 4. If fail, open upper case, check 100 pin cable between IO board and MB well connected or not 5. If fail, replace with another MB for testing 6. If fail, system RMA to EBN
1010	PS/2 Mouse Fail	1.100PIN Cable 2.MB(2.3.1)	1. Shut down power 2. Check mouse cable connection 3. If fail, replace with another mouse 4. If fail, open upper case, check 100 pin cable between IO board and MB well connected or not 5. Replace with another MB for testing 6. If fail, system RMA to EBN
1011	MSR Fail	1. MSR to MB Cable(2.5.4) 2. MB(2.3.1)	1. Shut down power 2. Open upper case, check if MSR cable goes underneath inverter and well connected to MB location (CN12). Note: the cable must go through EMI chassis breach 3. If fail, replace with another MSR 4. If fail, RMA MSR to EBN
1012	COM Port Fail	1. Jumper setting 2. 100PIN cable 3. MB(2.3.1)	1. Shut down power 2. Move to Bottom side, open jumper setting cover, check if jumper setting same with default setting chart. Note: If device connector is with voltage, jumper setting needs to change to 5V or 12V based on different device definition 3. If fail, open upper case, check 100pin cable to MB well connected or not 4. If fail, replace with another MB for testing 5. If fail, RMA system to EBN
1013	USB Fail	1. Device Check 2. USB cable 3. MB(2.3.1)	1. Shut down power 2. Check device cable to USB port well connected or not 3. If fail, replace with another device 4. If fail, open upper case, check USB Cable to MB location (CN11) well connected or not 5. If fail, replace with another MB for testing 6. If fail, RMA system to EBN

1.2 BIOS Upgrade

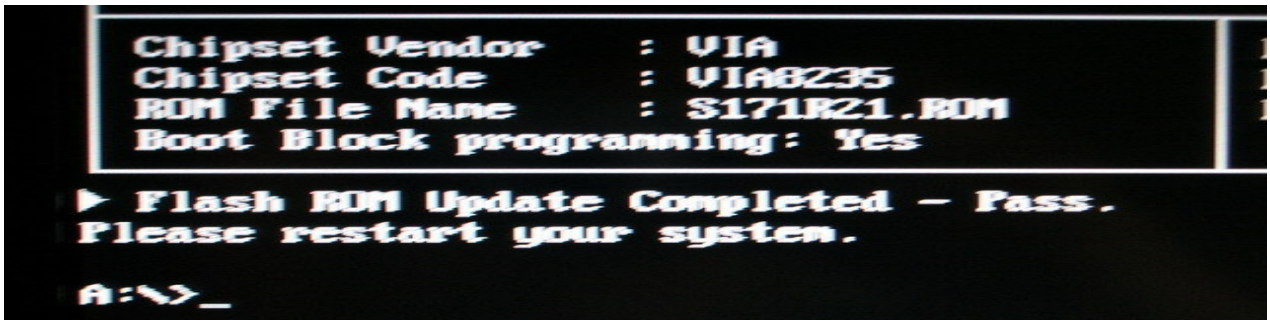
1. Boot the system with a bootable floppy disk
   a. A Windows 98/ME startup disk can be used
   b.Or you can create an MS-DOS startup disk under Windows XP, to create an MS-DOS startup disk under
   Windows XP, right click on the 3 ½ floppy drive icon under my computer and select format. On the format
   dialog box, check the box next to “Create MS-DOS startup disk” and then click the start button to make a
   MS-DOS startup disk..
2. Once you boot off of the bootable floppy disk, replace the bootable floppy disk with the floppy disk containing
   the bios files.
3. To update the BIOS using the example above you would type the following command.
   a. A:\F82744 s171r21.rom, then push the enter key.



   b. Follow the onscreen prompts to update the BIOS.


AMI Flash Utility V8.27.44
Flash ROM Programming Report
Chipset Vendor : VIA
Chipset Code : VIA8235
ROM File Name : S171R21.ROM
Boot Block programming: Yes
Flash ROM Vendor : SST
Flash ROM Code : 39SF040_V1
ROM File Size : 512 Kb

4. DO NOT TURN OFF THE POWER or RESET/REBOOT the SYSTEM before the BIOS update is completed, stopping the BIOS UPATE before it is completed will cause the system to become non-functional.


Chipset Vendor : VIA
Chipset Code : VIA8235
ROM File Name : S171R21.ROM
Boot Block programming: Yes
Flash ROM Update Completed - Pass.
Please restart your system.
A:\>_

5. Reboot the system once the bios update has been completed.

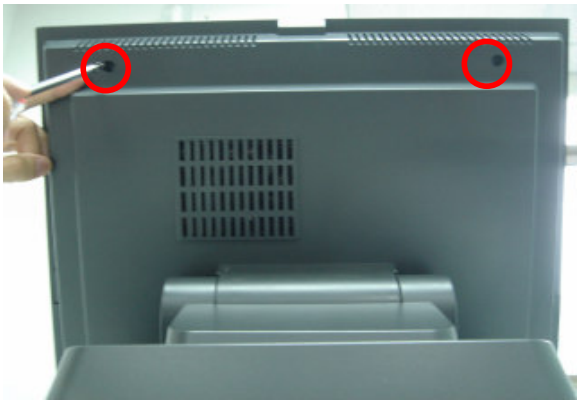
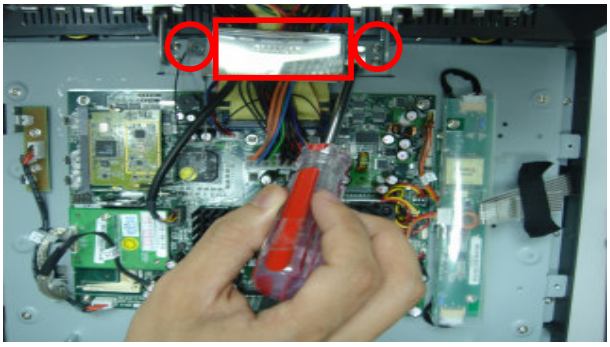
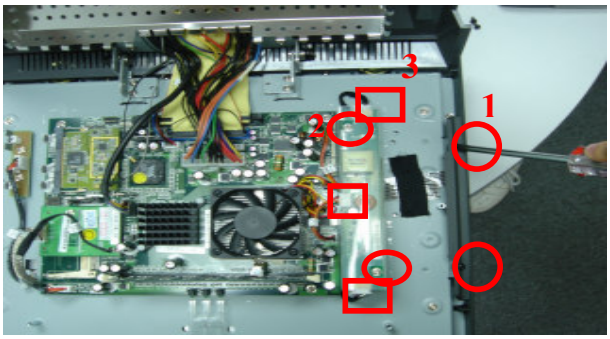
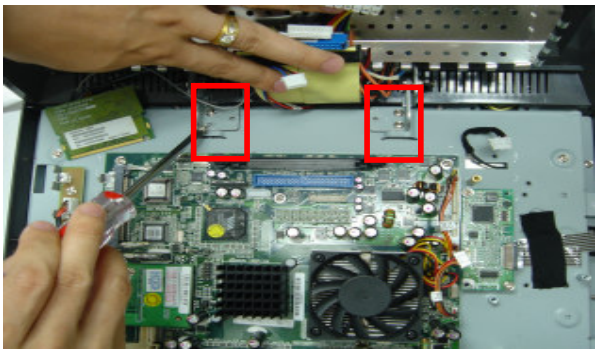
Note:

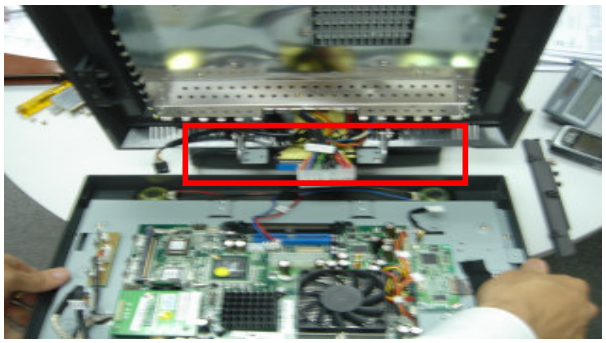
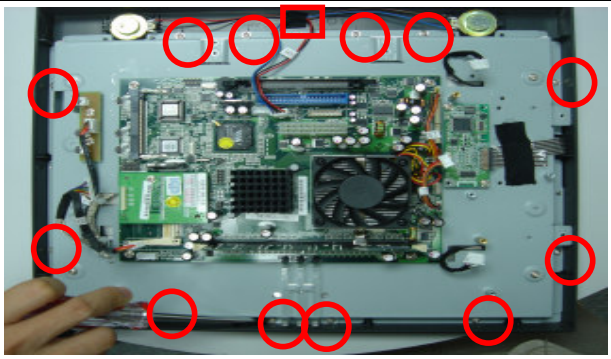
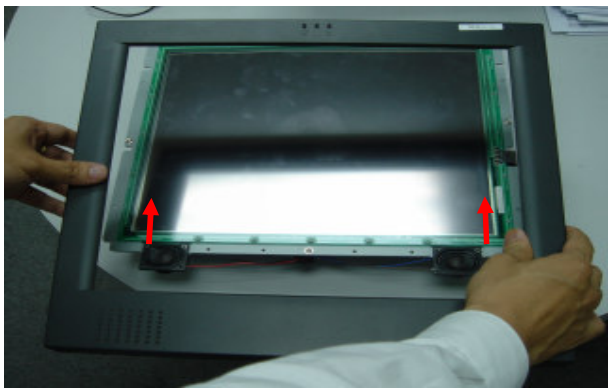
The BIOS contained here are exclusively for EBN POS72/75 only. EBN assumes no responsibility for any damages resulting from improper use or lack of technical expertise.

2 Chapter 2 : Disassembly , Assembly

2.1 Main Unit

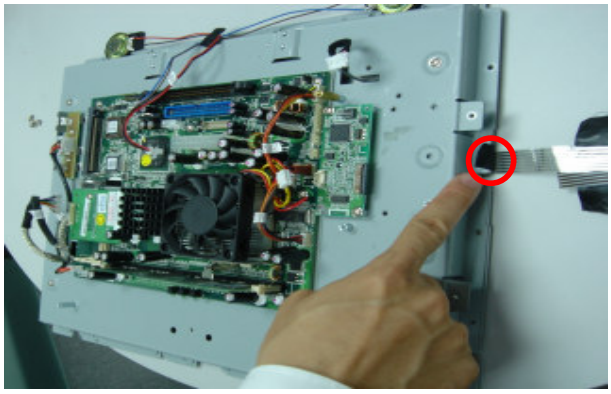
2.1.1 Front Bezel + Sponge Bezel

Item	Photo	Description
1		1. Use screw driver to open upper case. 2. 2 screws needs to be removed
2		1. Remove 2 screws 2. Remove cover bracket
3		1. Remove 2 screws from MSR cover 2. Remove 2 screws from inverter 3. Remove 3 cables from inverter
4		1. Remove 4 screws

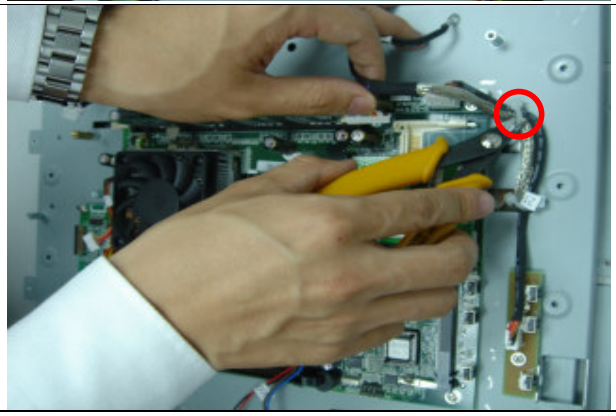
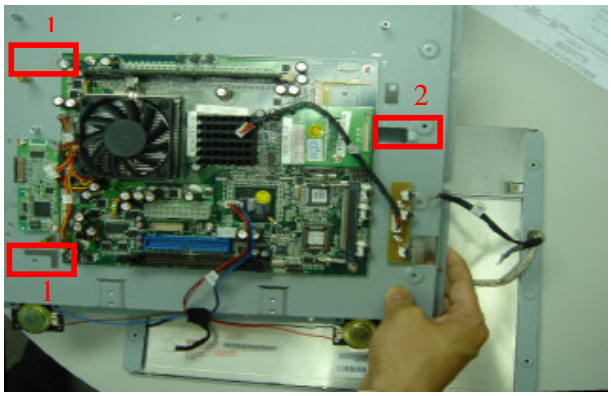
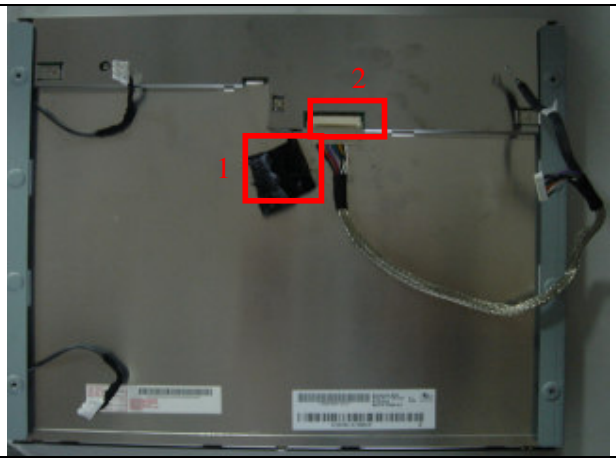
Item	Photo	Description
5		1. Separate front and back cover
6		1. Remove 12 screws 2. Remove speaker tape
7		1. Turn to front side 2. Remove and replace with another front bezel

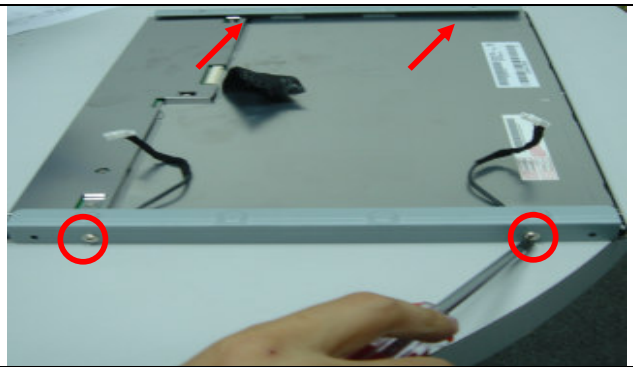
2.1.2 Touch Panel + Touch Screen Holder

Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 7 turn to Front side and remove front bezel 2. Remove 3 screws

Item	Photo	Description
2		1. Turn to back side and remove tape
3		1. Turn to front side and remove touch panel module 2. Replace with another touch panel module

2.1.3 LCD, AUO 15” 1024 x 768

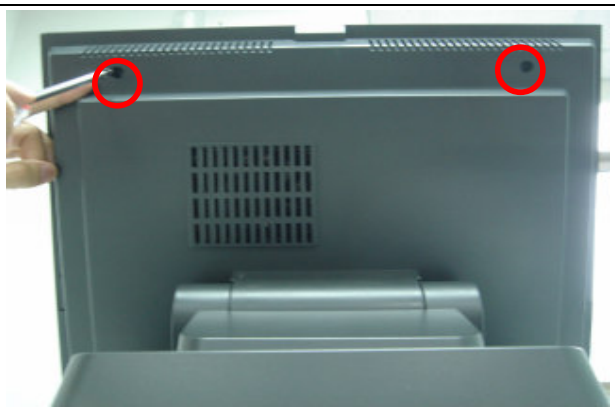
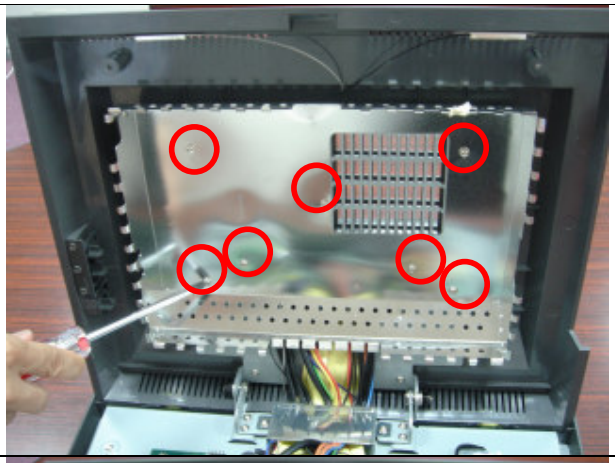
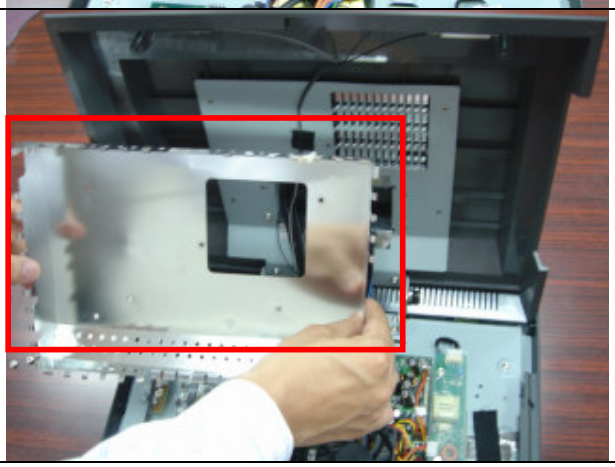
Item	Photo	Description
1		1. Follow 2.1.2 item 1 to item 3 (action 1) 2. Turn to back side 3. Remove 4 screws
2		1. Cut plastic string
3		1. Remove 2 inverter cables 2. Remove LCD cable from LCD chassis 3. Remove LCD chassis
4		1. Remove tape 2. Remove LCD cable

Item	Photo	Description
5		1. Remove 2 screws from left LCD holder 2. Remove 2 screws from right LCD holder 3. Remove and replace with another LCD

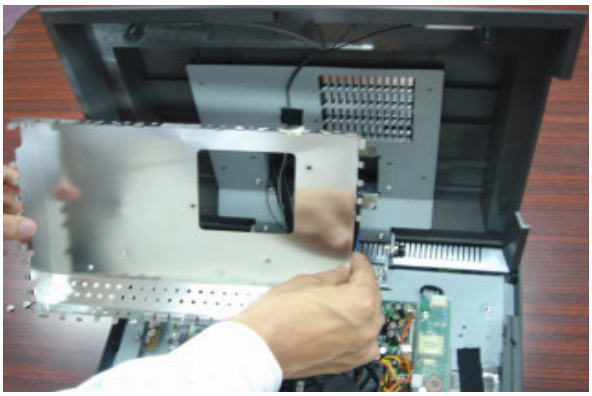
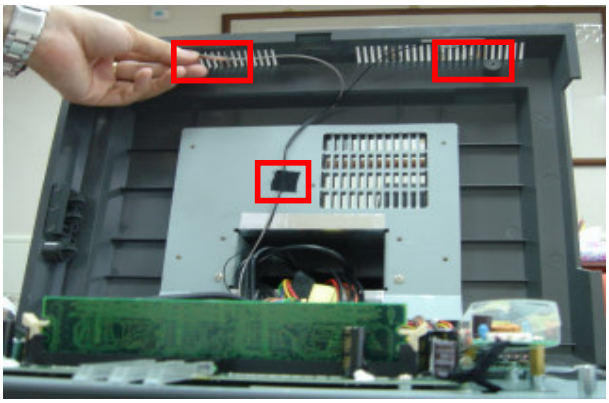
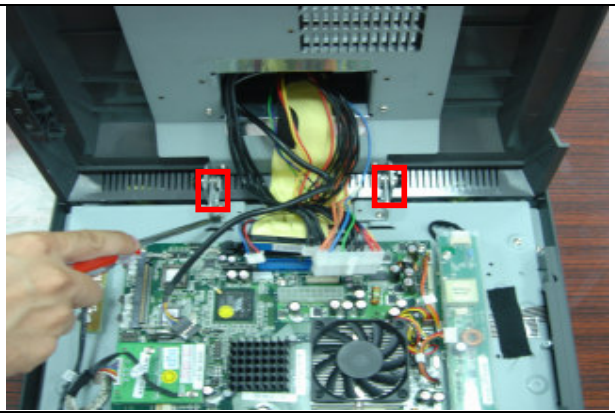
2.1.4 MSR (Refer to 2.5.4)

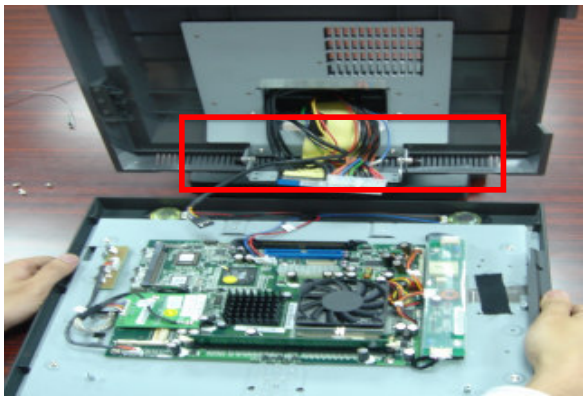
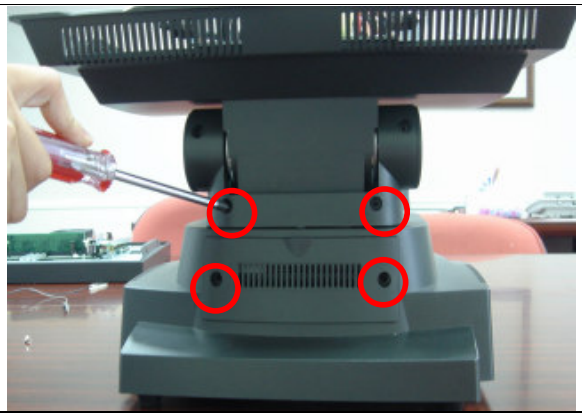
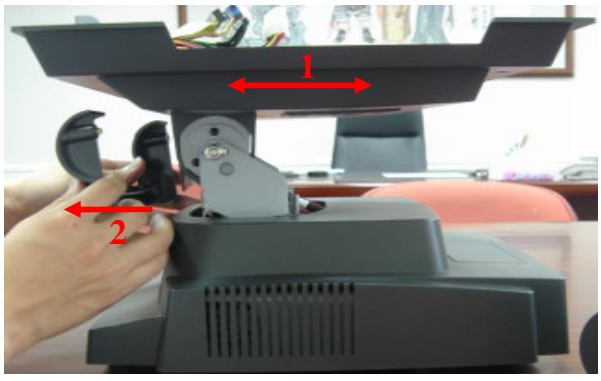
2.1.5 Mother Board (Refer to 2.3)

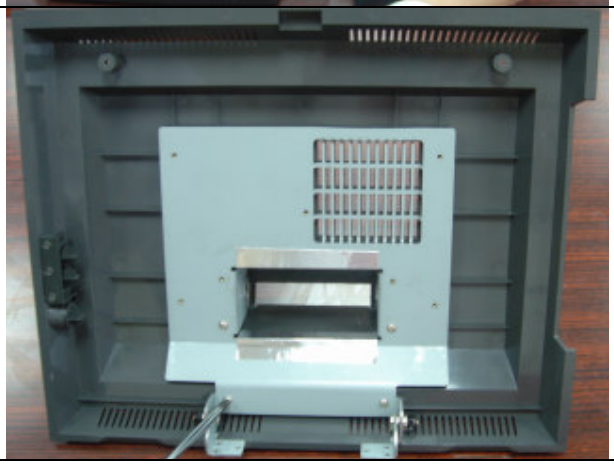
2.1.6 EMI Chassis

Item	Photo	Description
1		1. Remove 2 screws
2		1. Open upper case 2. Remove 7 screws
3		1. Remove and replace another EMI chassis

2.1.7 Key Lock Set

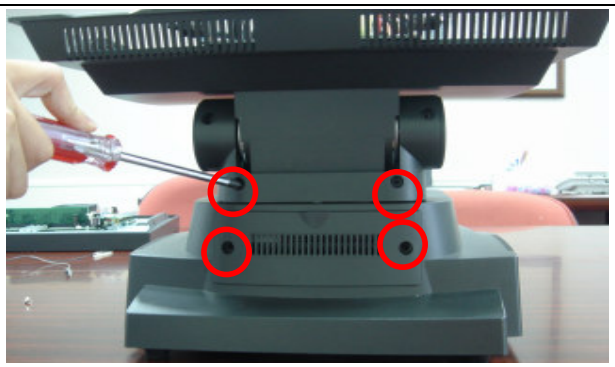
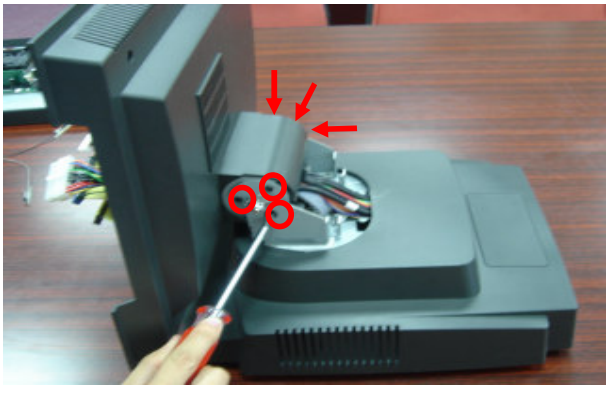
Item	Photo	Description
1		1. Follow 2.1.6 item 1 to 3 remove EMI chassis
2		1. Remove 2 screws 2. Remove cover bracket
3		1. Remove 2 antennas 2. Remove tape
4		1. Remove 4 screws

Item	Photo	Description
5		1. Separate front cover from back cover
6		1. Remove 4 screws from hinge
7		1. Set upper case vertically 2. Remove back hinge cover
8		1. Set upper case horizontally 2. Remove front hinge cover

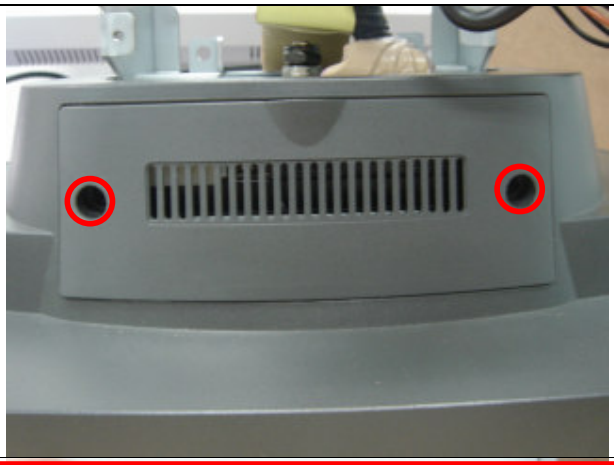
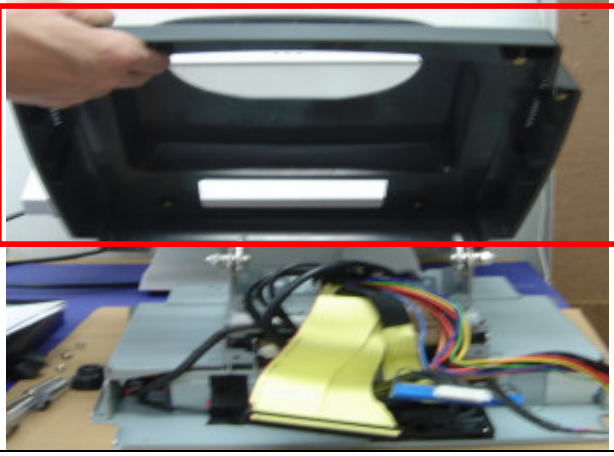
Item	Photo	Description
9		1. Remove 3 screws at left hinge 2. Remove 3 screws at right hinge
10		1. Separate upper case from bottom case 2. Pull out cables from upper case
11		1.Remove and replace with another key lock set (W/ LCD Hinge Assembly / LCD Base)

2.2 Base Unit

2.2.1 Base Housing

Item	Photo	Description
1		1. Remove 4 screws from hinge front side
2		1. Set upper case vertically 2. Remove back hinge cover
3		1. Set top upper case horizontally 2. Remove front hinge cover
4		1. Remove 3 screws at left hinge 2. Remove 3 screws at right hinge

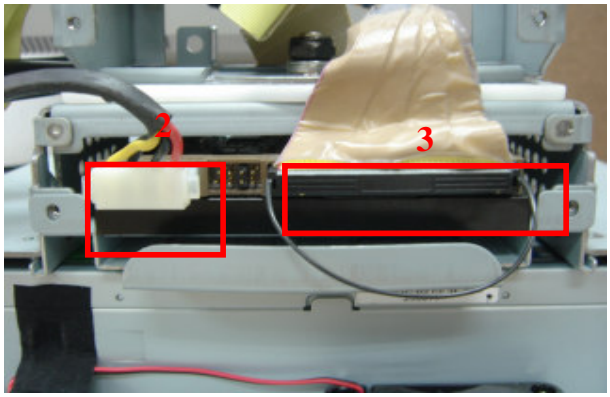
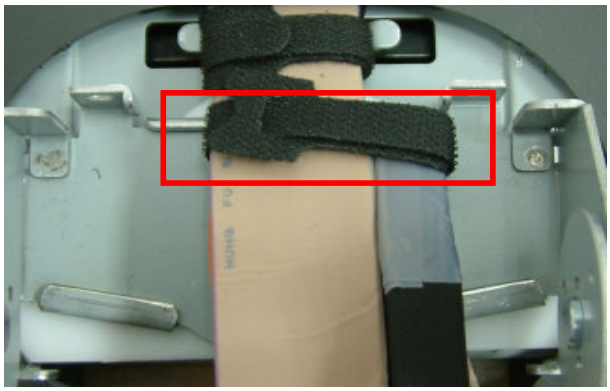
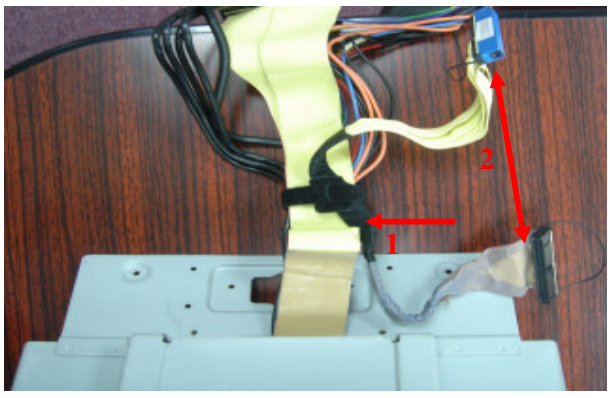
Item	Photo	Description
5		1. Separate upper case from bottom case 2. Pull out cables from upper case
6		1. Turn the bottom case to the bottom side 2. Remove 2 screws to take off the kit cover
7		1. Turn the bottom case top side 2. Take off kit cover
8		1. Turn the bottom case to the bottom side 2. Remove 4 screws 3. Remove 4 Plastic foot

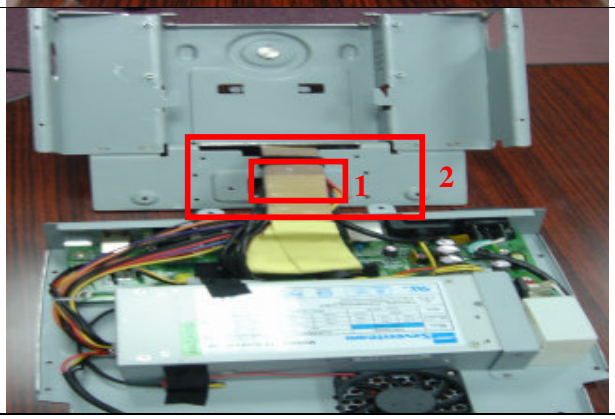
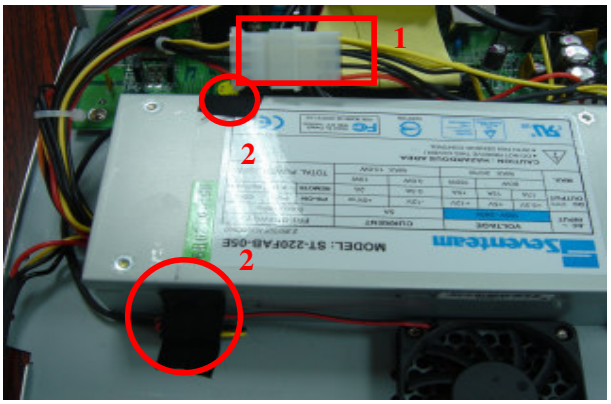
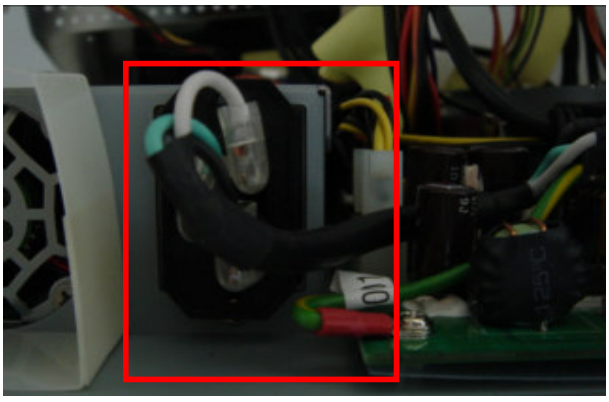
Item	Photo	Description
9		1. Turn to the rear side of the bottom case 2. Remove 2 screws to open the HDD cover
10		1. Remove and replace with another base housing from base chassis

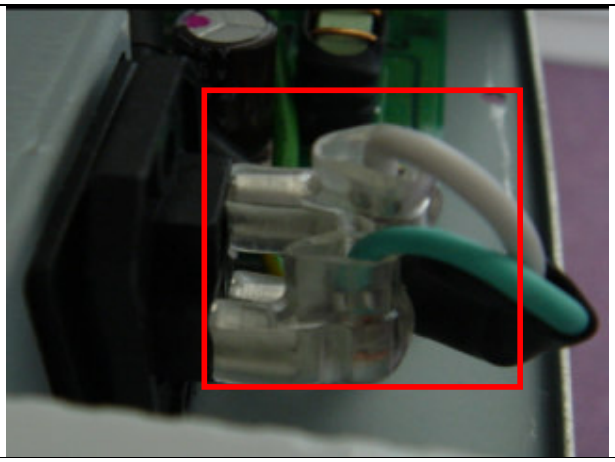
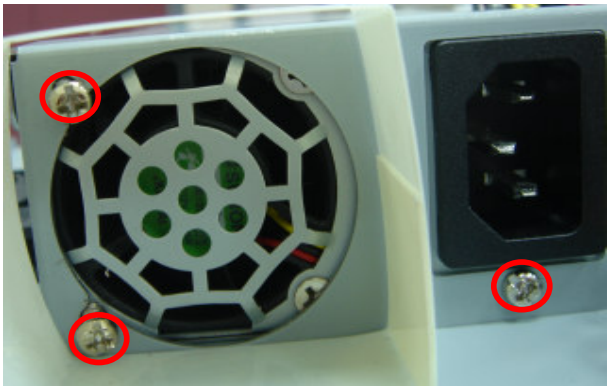
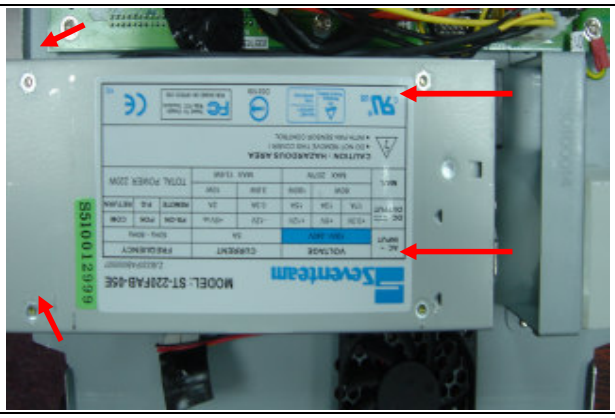
2.2.2 Swivel Housing Rear / Front

Item	Photo	Description
1		1. Remove 4 screws from hinge
2		1. Set upper case vertically 2. Remove back hinge cover
3		1. Set upper case horizontally 2. Remove front hinge cover

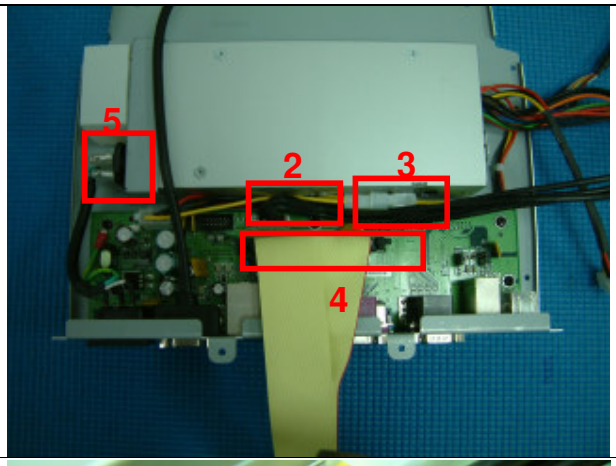
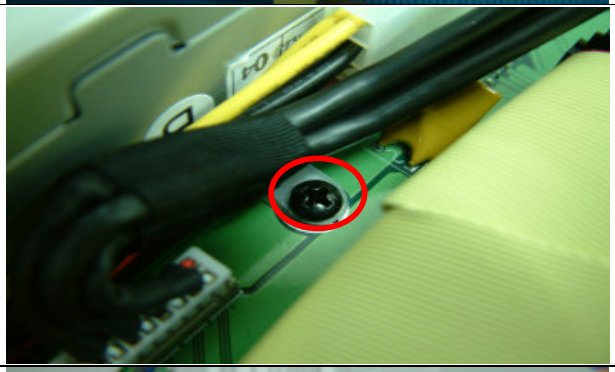
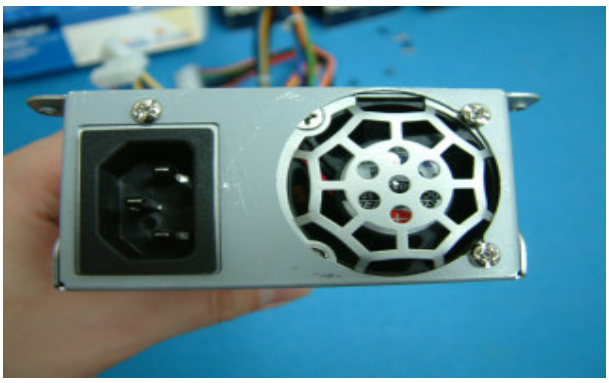
2.2.3 P/S 220W W/PFC

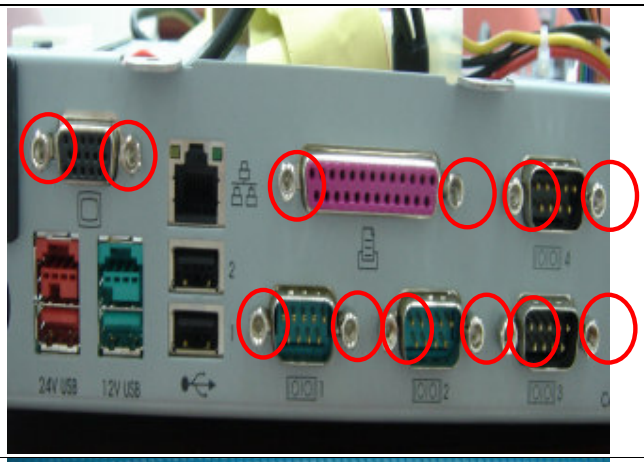
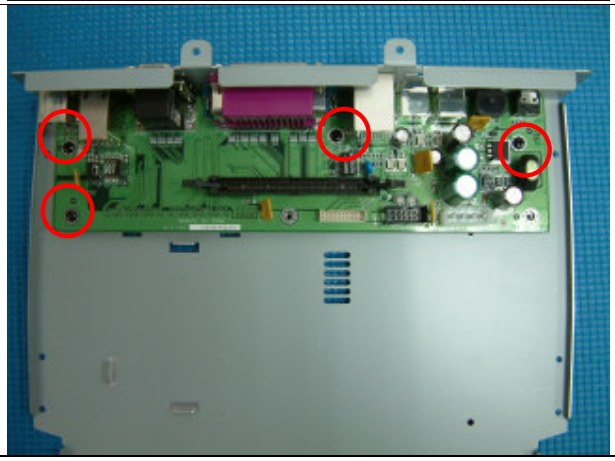
Item	Photo	Description
1		1. Follow 2.2.1 item 1 to 10 (Remove base housing) 2. Remove power cable 3. Remove HDD to M/B cable 4. Pull out HDD tray
2		1. Turn to bottom side and remove 6 screws
3		1. Turn to top side 2. HDD cable is tied with another black magic sticker separately
4		1. Remove black magic sticker used for HDD cable 2. Remove HDD cable

Item	Photo	Description
5		1. Separate swivel hinge from base chassis
6		1. Remove black magic sticker used for tightening cables 2. Pull out cables from swivel hinge one by one
7		1. Remove power cable which connects PSU and I/O Board 2. Remove 2 tapes
8		1. Remove black connector together with cables from power supply

Item	Photo	Description
9		1. Pay attention to the position for cable
10		1. Remove 3 screws
11		1. Pull up from the hooker and pull to left direction to remove power supply 2. Replace with another power supply

2.2.4 I/O Board

Item	Photo	Description
1		1. Follow 2.2.3 item 1 to 6 2. Remove USB Cable 3. Remove Power supply to I/O board cable 4. Remove 100pin cable 5. Remove power supply to AC input cable
2		1. For USB cable, need to remove 1 screw from I/O board
3		1. Turn to bottom side 2. Remove 2 screws
4		1. Remove power supply module from base chassis

Item	Photo	Description
5		1. Remove 12 screws
6		1. Remove 4 screws on I/O board 2. Remove and replace with another I/O board 3. Follow steps back to item 1 for assembly

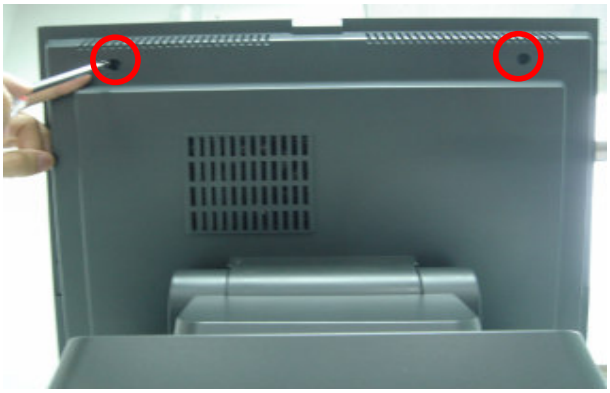
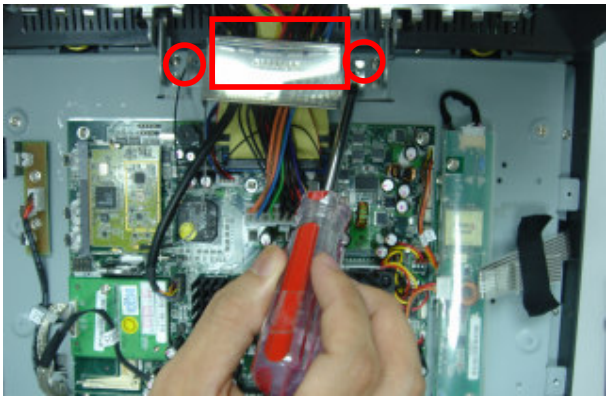
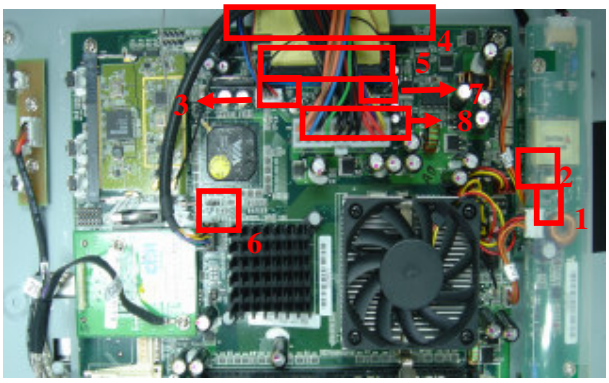
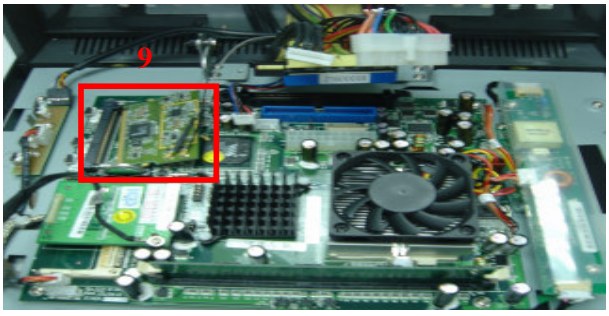
2.2.5 HDD / HDD Tray (Refer to 2.5.2)

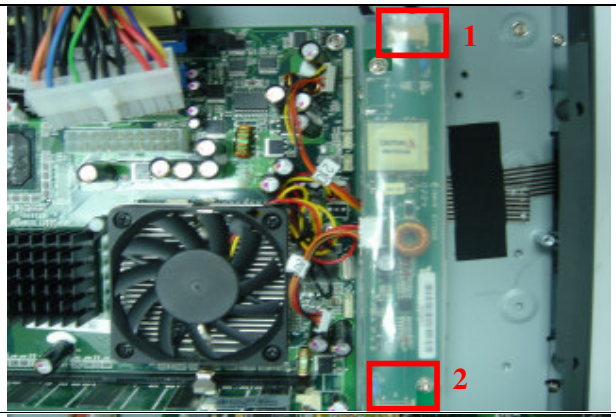
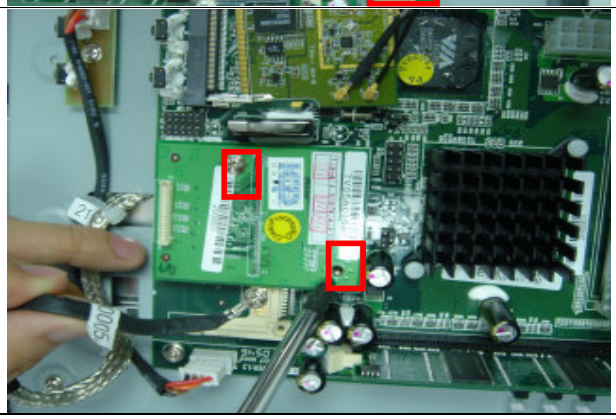
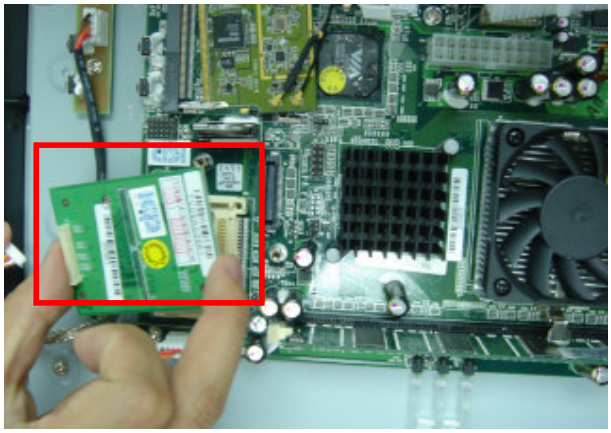
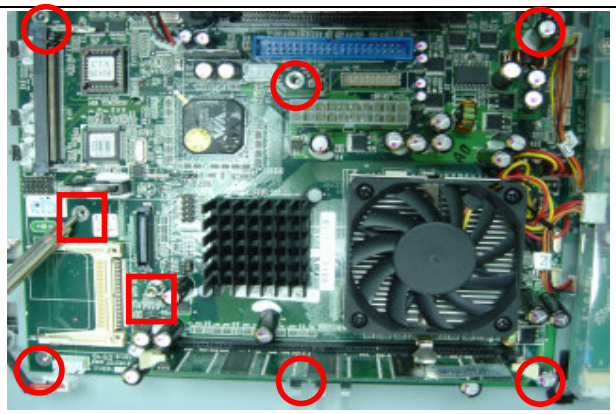
2.2.6 Jumper Cover

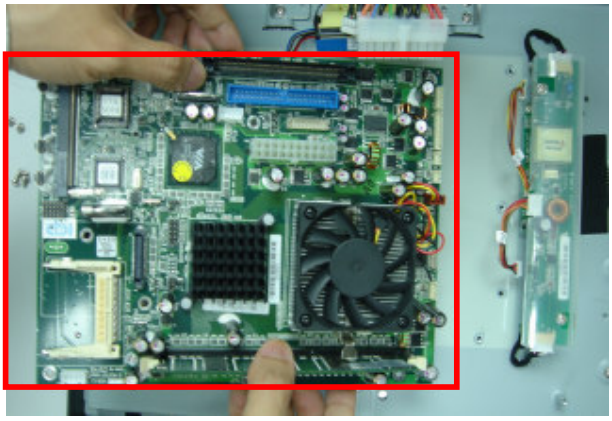
Item	Photo	Description
1		1. Turn the bottom case to the bottom side 2. Remove 1 screw 3. Remove and replace with another jumper cover

2.3 Boards

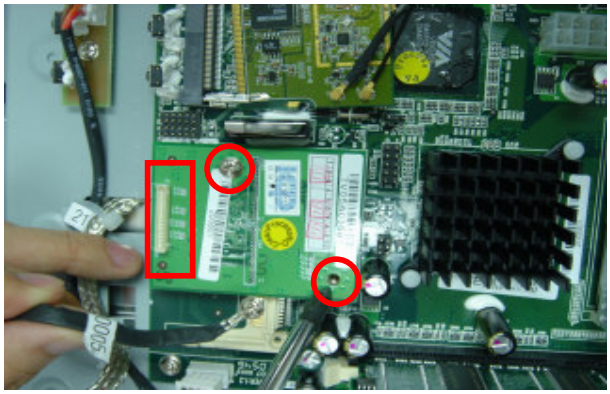
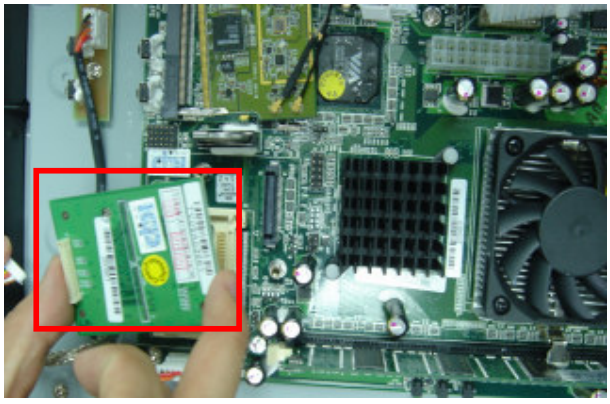
2.3.1 Main Board

Item	Photo	Description
1		1. Use screw driver to open upper case. 2. Remove 2 screws
2		1. Remove 2 screws 2. Remove cover bracket
3	 	1. Remove Cables, M/B To Inverter 2. Remove Cables, M/B To Touch Control Board 3. Remove Cables, M/B To Speaker 4. Remove Cables, M/B To I/O BD 100P 5. Remove Cables, M/B To HDD 80P 6. Remove Cables, 2nd VGA 10P 7. Remove Cables, M/B To I/O BD 20P USB 8. Remove Cable, M/B To Power Supply 9. Remove Mini PCI

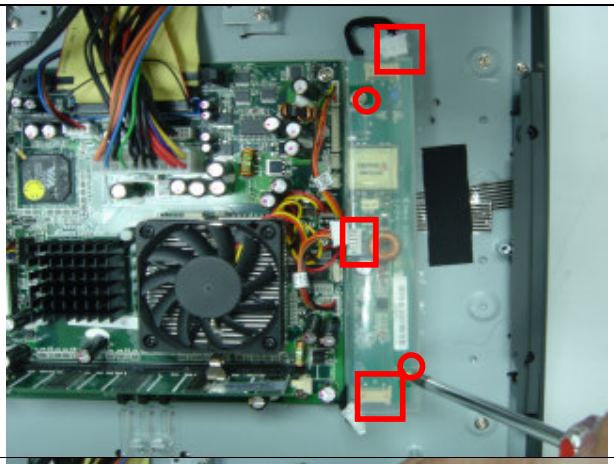
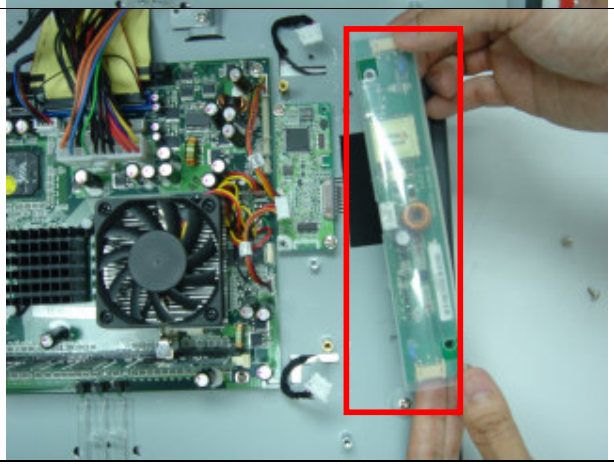
Item	Photo	Description
4		1. Remove Inverter Cable on top 2. Remove Inverter Cable bottom
5		1. Remove 2 screws on bridge board
6		1. Remove bridge board
7		1. Remove 6 screws on M/B 2. Remove 2 銅柱

Item	Photo	Description
8		1. Remove and replace with another M/B

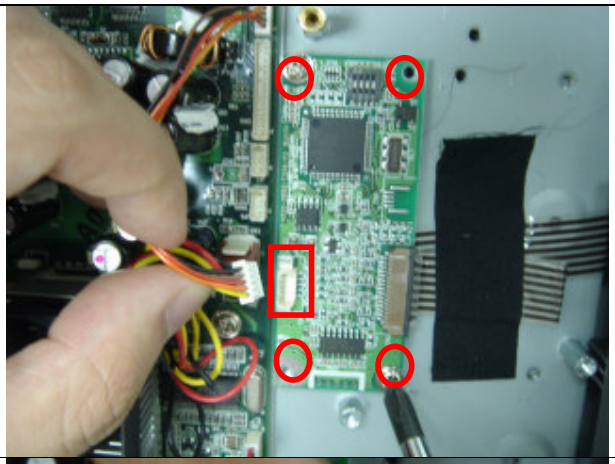
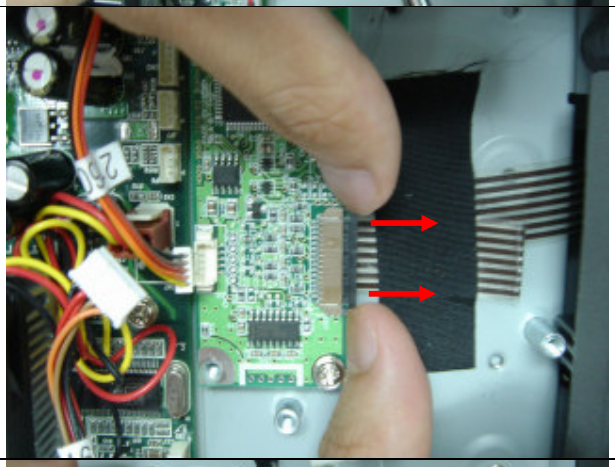
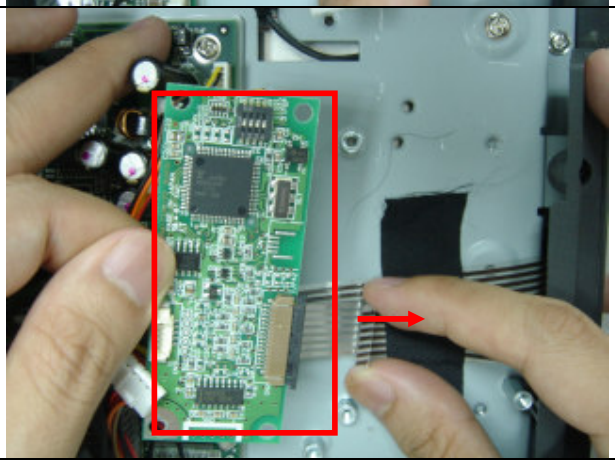
2.3.2 Bridge Board

Item	Photo	Description
1		1. Follow 2.3.1 item 1 2. Open upper case 3. Remove VGA cable from bridge board 4. Remove 2 screws on bridge board
2		1. Remove and replace another bridge board

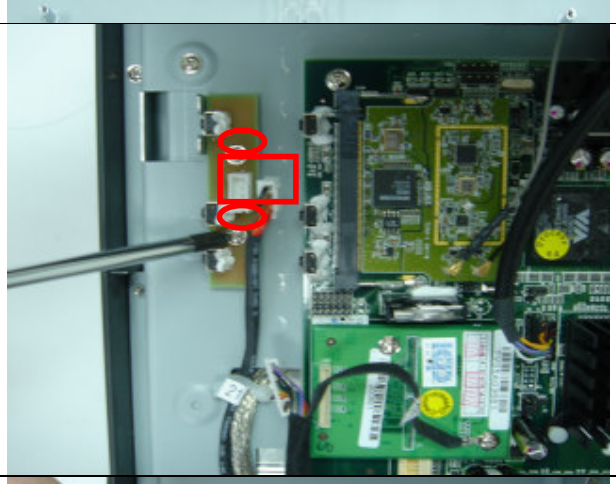
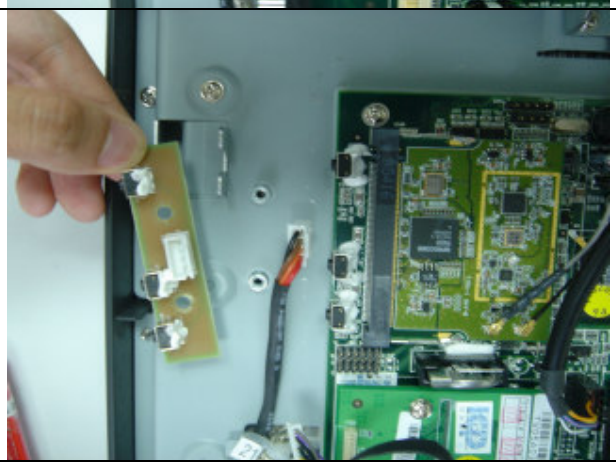
2.3.3 Inverter

Item	Photo	Description
1		1. Follow 2.3.1 item 1 2. Remove 3 cables 3. Remove 2 screws
2		1. Remove and replace with another inverter board

2.3.4 Touch Control Board

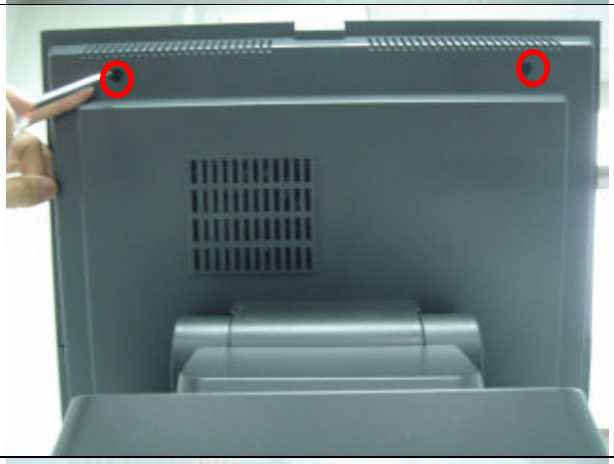
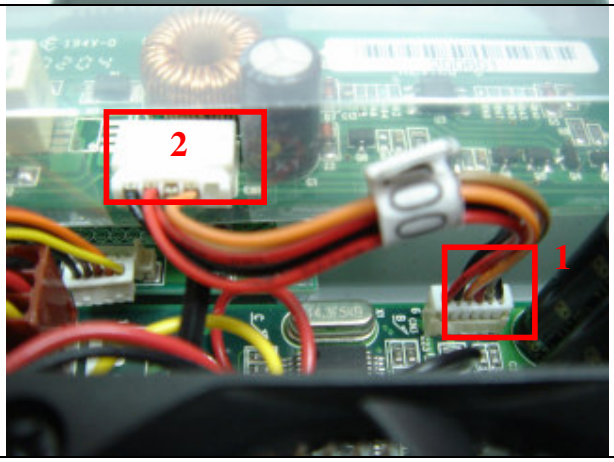
Item	Photo	Description
1		1. Follow 2.3.3 item 1 to 2 remove inverter board 2. Remove cable from touch control board 3. Remove 4 screws
2		1. Push out black clicker from connector CN2
3		1. Remove touch control board 2. Pull out touch panel cable 3. Replace with anther touch control board

2.3.5 Button Board (For POS 75)

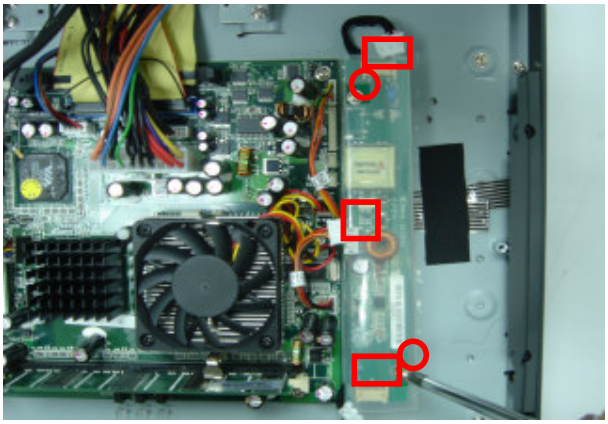
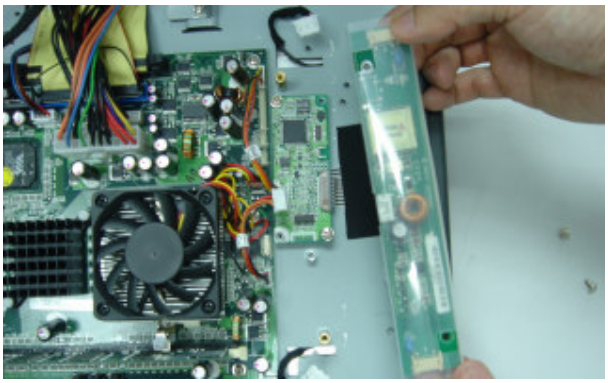
Item	Photo	Description
1		1. Follow 2.3.1 item 1 2. Open upper case
2		1. Remove cable from button board 2. Remove 2 screws
3		1. Remove and replace with another button board

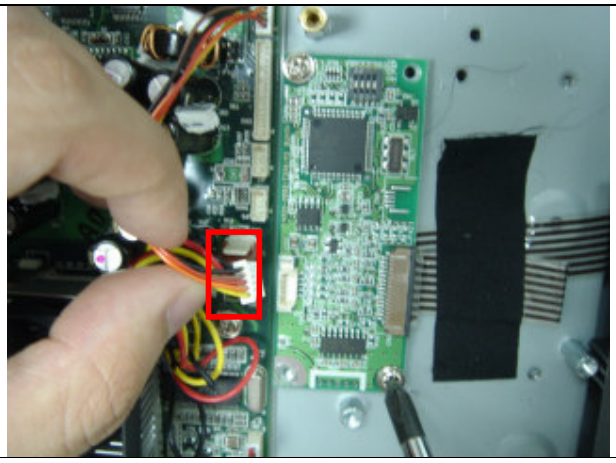
2.4 Cables

2.4.1 Cable, M/B To Inverter

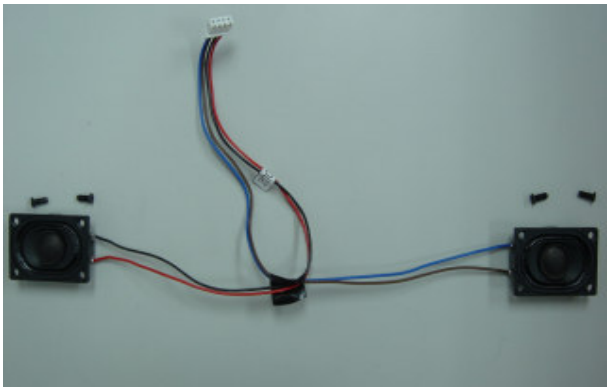
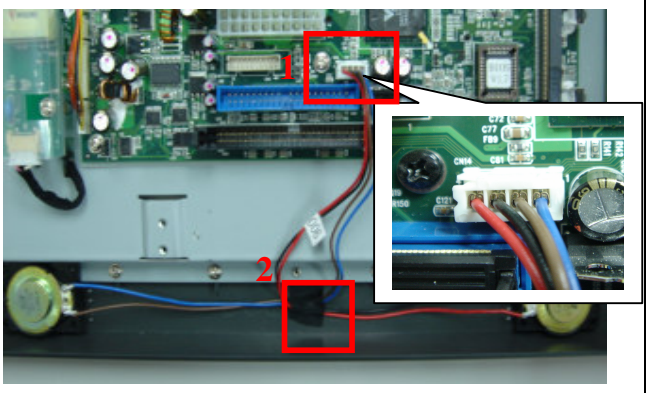
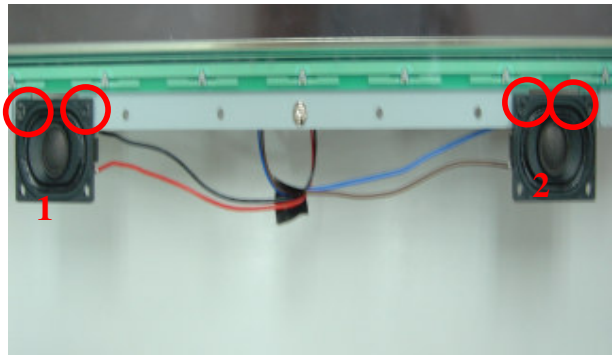
Item	Photo	Description
1		Part Number: 21600003RH
2		1. Use screw driver to open upper case. 2. Remove 2 screws
3		1. Remove cable on MB location CN17 2. Remove cable on inverter board 3. Replace with another inverter cable

2.4.2 Cable, M/B To Touch Control BD

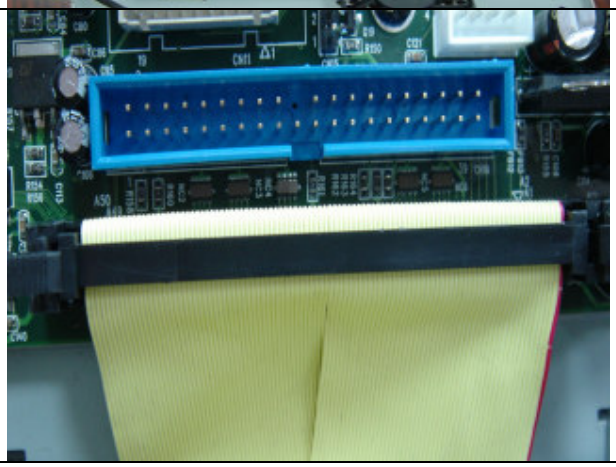
Item	Photo	Description
1		1. Part Number: 21600004RH
2		1. Use screw driver to open upper case. 2. Remove 2 screws
3		1. Remove 3 cables 2. Remove 2 screws
4		1. Remove inverter board

Item	Photo	Description
5		1. Remove and replace with another Touch Control board cable (Main Board Location CN 17) 2. Follow steps back to item 1 for assembly

2.4.3 Cable, M/B To Speaker

Item	Photo	Description
1		Part Number: 21600006RH
2		1. Follow 2.1.1 item 1 to 7 turn to Front side and remove front bezel
3		1. Turn to back side and remove cable on MB location CN 14 2. Remove black tape
4		1. Remove 2 screws on left speaker 2. Remove 2 screws on right speaker 3. Replace with another speaker cable 4. Follow steps back to item 1

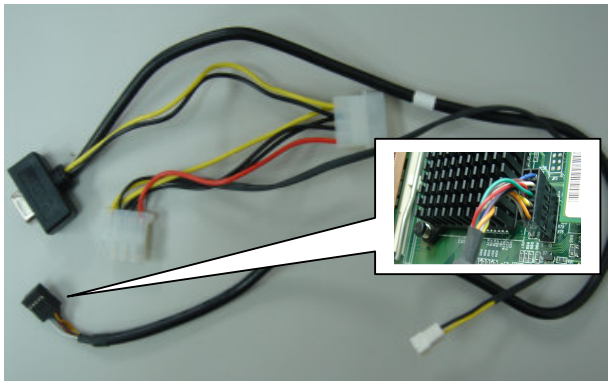
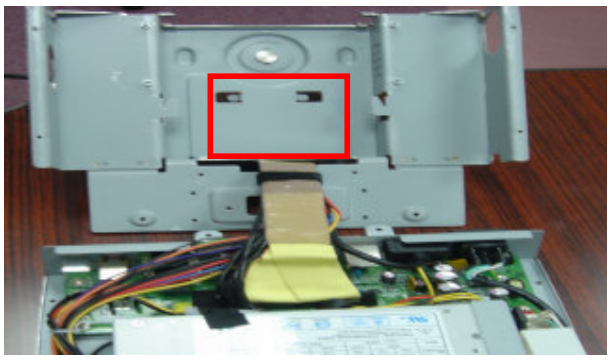
2.4.4 Cable, M/B To I/O BD 100P

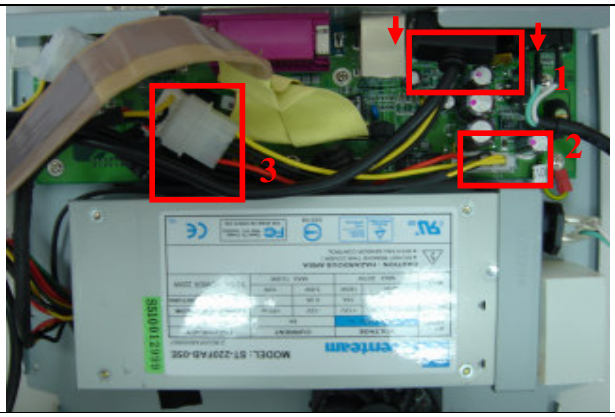
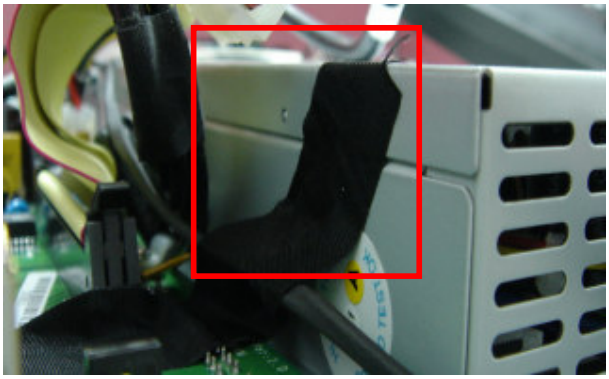
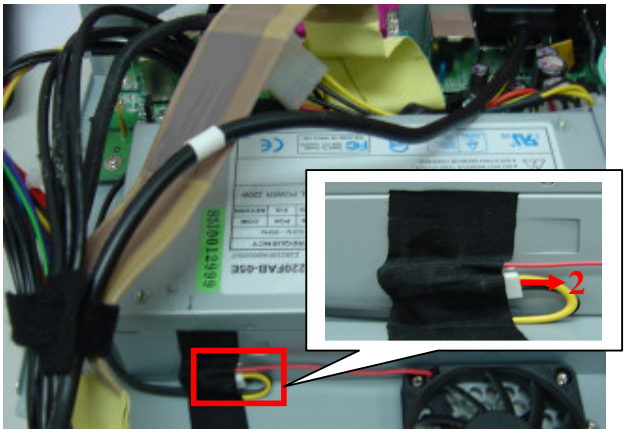
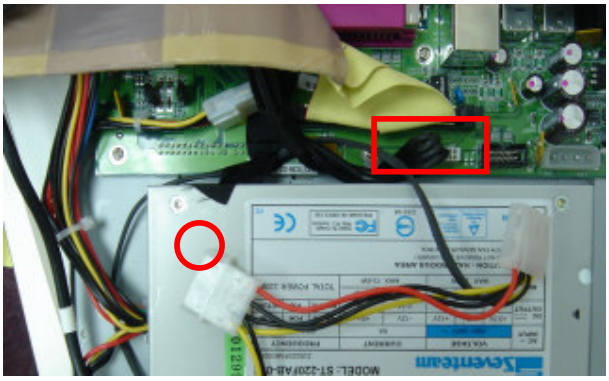
Item	Photo	Description
1		1. Part Number: 21600007RH
2		1. Follow 2.1.7 item 1 to 9 to disassemble upper case 2. Follow 2.2.1 item 1 to 10 to disassemble base unit 3. Follow 2.2.3 item 1 to 7 to remove tapes and power supply cable 4. Remove black magic sticker 5. Pull out cables from swivel hinge one by one
3		1. Remove and replace cable on IO Board Location CN2 2. Follow steps back to item 1 for assembly

2.4.5 Cable, M/B To HDD 80P

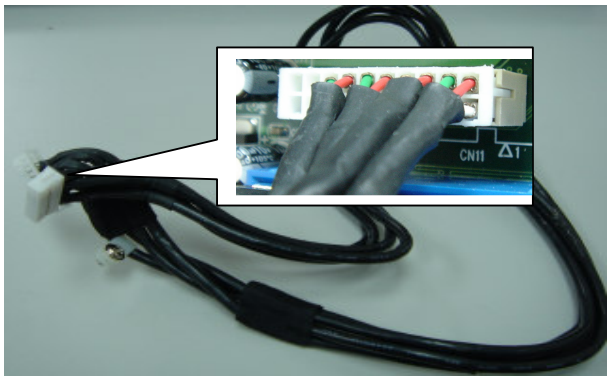
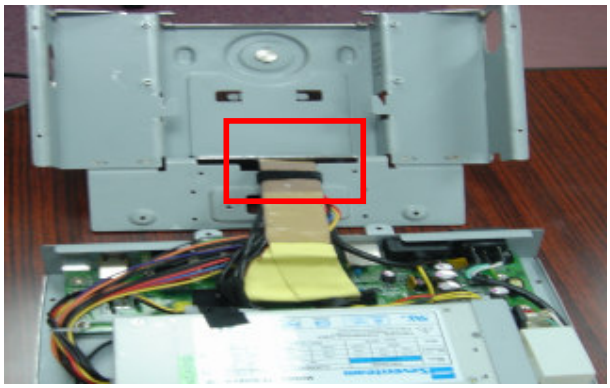
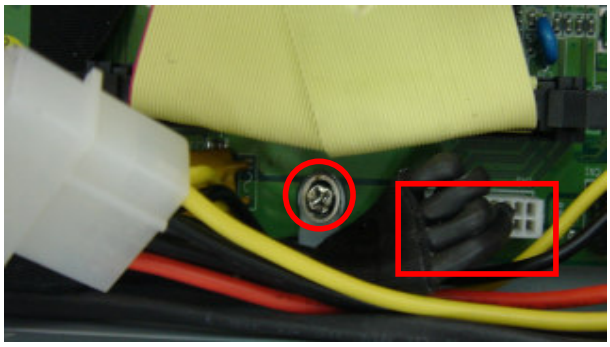
Item	Photo	Description
1		Part Number: 21600008RH
2		1. Follow 2.2.1 item 1 to 10 to disassemble base unit 2. Remove and replace with another HDD cable 3. Follow steps back to item 1 for assembly

2.4.6 Cable, 2nd VGA to I/O Board

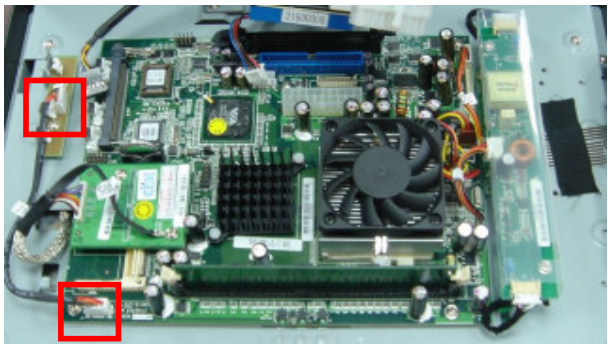
Item	Photo	Description
1		Part Number: 21600009RH Location on M/B CN5
2		1. Follow 2.1.7 item 1 to 9 to disassemble upper case 2. Follow 2.2.1 item 1 to 10 to disassemble base unit 3. Follow 2.2.3 item 1 to 7 4. Remove black magic sticker 5. Pull out cables from swivel hinge one by one

Item	Photo	Description
3		1. Remove 2 screws from front side to disassemble VGA connector 2. Remove power cable from IO board 3. Remove power cable
4		1. Remove black tape
5		1. Remove black tape 2. Remove fan cable
6		1. Remove screw from USB cable 2. Remove USB cable connector in order to take off AC Inlet To P/S cable 3. Replace with another AC Inlet To P/S cable 4. Follow steps back to item 1 for assembly

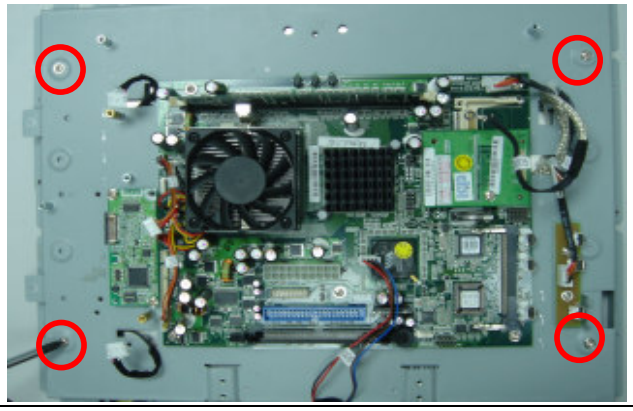
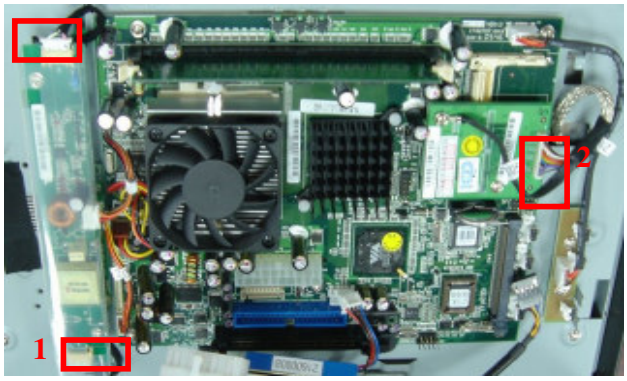
2.4.7 Cable, M/B To I/O BD 20P USB

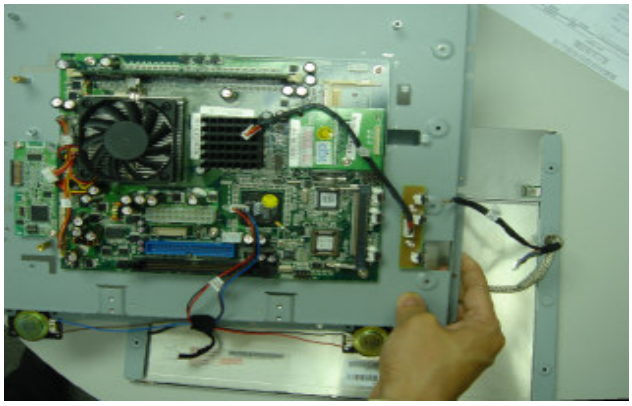
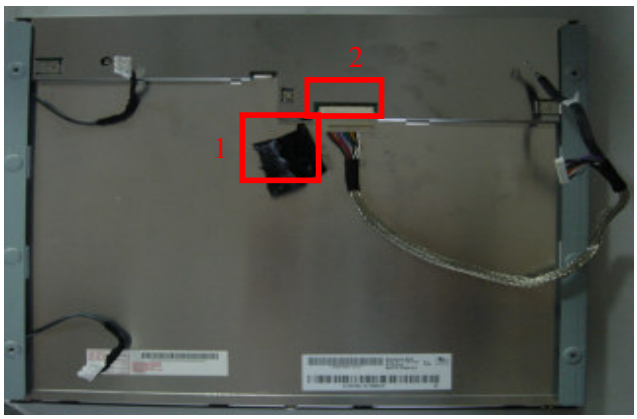
Item	Photo	Description
1		Part Number: 21600016 MB Location CN11
2		1. Follow 2.1.7 item 1 to 9 to disassemble upper case 2. Follow 2.2.1 item 1 to 10 to disassemble base unit 3. Follow 2.2.3 item 1 to 7 4. Remove black magic sticker 5. Pull out cables from swivel hinge one by one
3		1. Remove screw from IO Board 2. Remove and replace another USB cable 3. Follow steps back to item 1 for assembly

2.4.8 Cable, M/B To Button Board

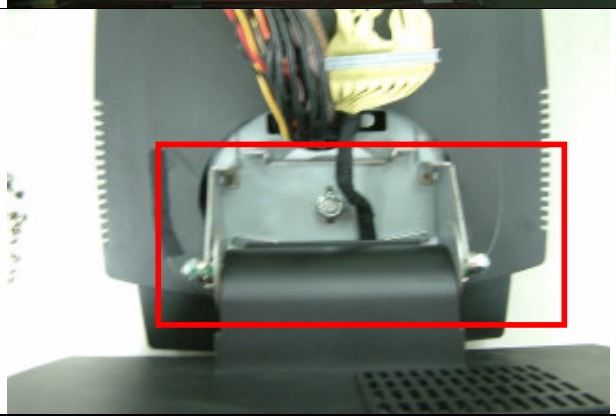
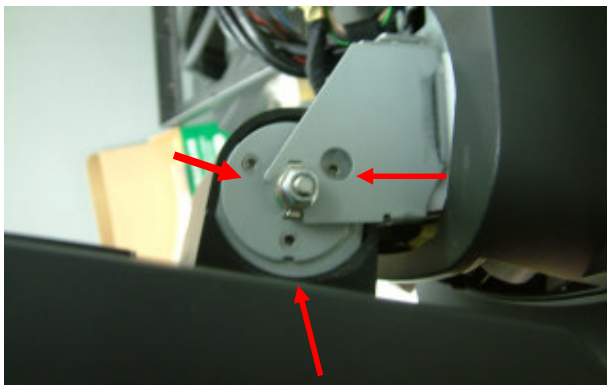
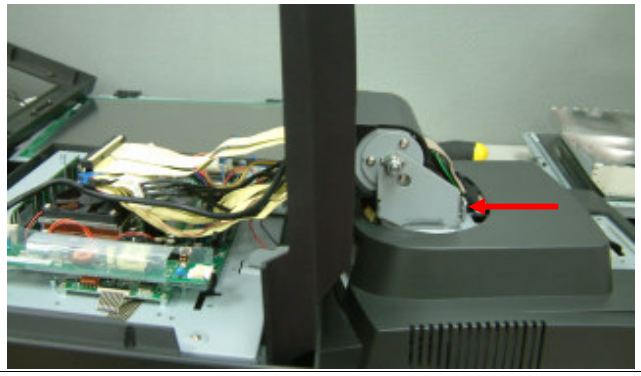
Item	Photo	Description
1		1. Follow 2.3.1 item 1 2. Open upper case 3. Remove and Replace with another M/B to Button board cable

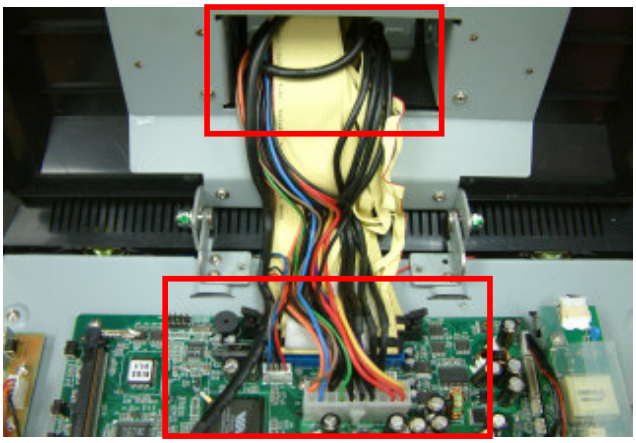
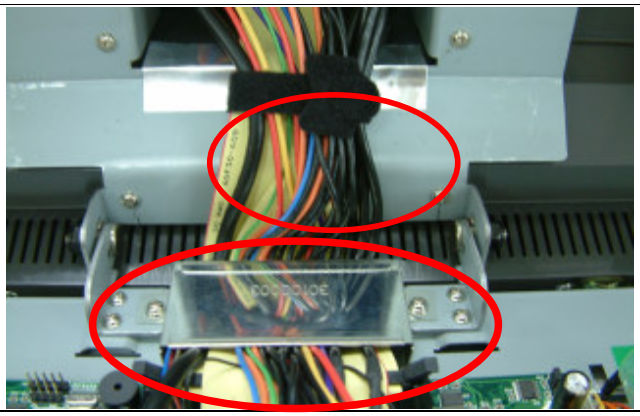
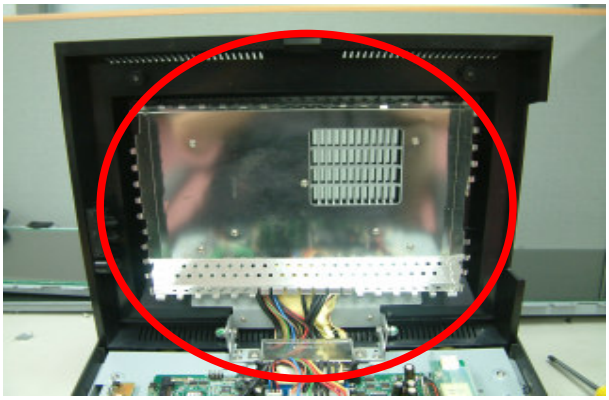
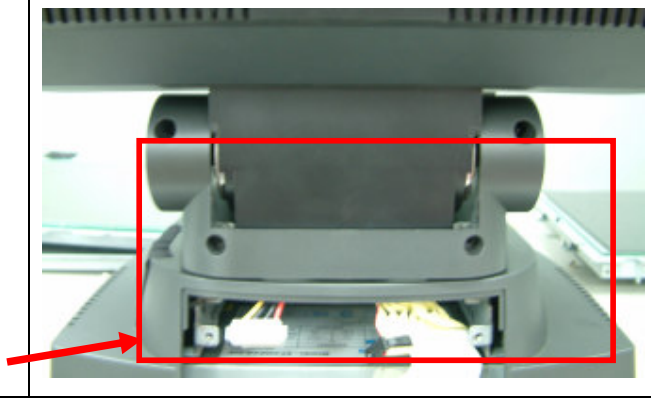
2.4.9 Cable, LCD to Bridge Board

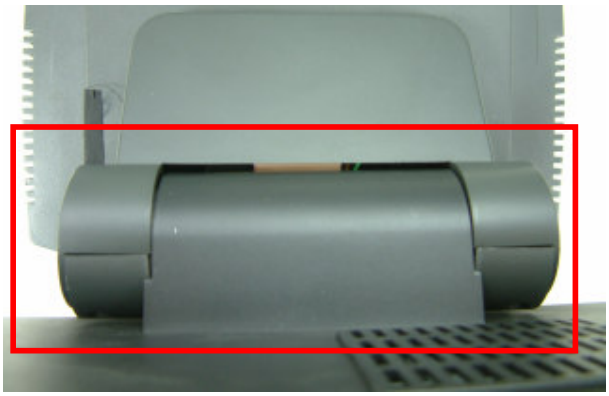
Item	Photo	Description
1		1 Part No.:21600005RH
2		1. Follow 2.1.2 item 1 to item 3 remove touch panel 2. Turn to back side 3. Remove 4 screws
3		1. Cut plastic string
4		1. Remove 2 inverter cables 2. Remove LCD cable from bridge board

Item	Photo	Description
5		1. Remove LCD chassis
6		1. Remove tape 2. Remove and replace with another LCD cable 3. Follow steps back to item 1 for assembly

2.5 Main & Base Unit assembly

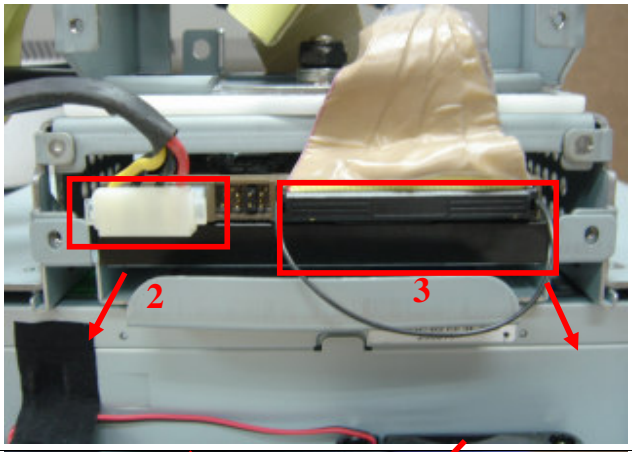
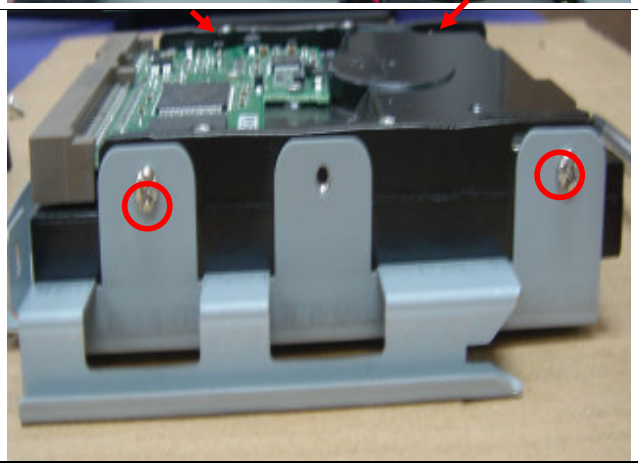
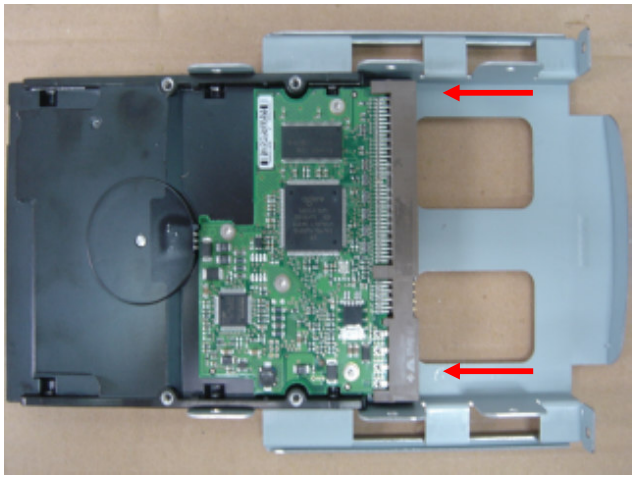
Item	Photo	Description
1		1. Prepare upper and base unit
2		1. Put upper unit on the swivel hinge
3		1. Fasten 3 screws on the left side of neck 2. Fasten 3 screws on the right side of neck
4		1. Put cables through upper case hole

Item	Photo	Description
5		1. Cables must go through the hole at center of upper case 2. Connect cables to the MB
6		1. Tied cables with magic tape 2. Fasten cover bracket with 2 screws
7		1. Fasten EMI cover on the upper case with 7 screws
8		1. Put on the front cover W/O fastening screws.

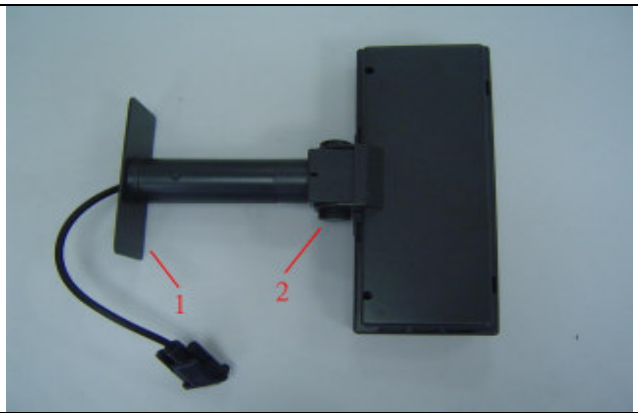
Item	Photo	Description
9		1. Put swivel hinge back cover on case
10		1. Fasten 4 screws

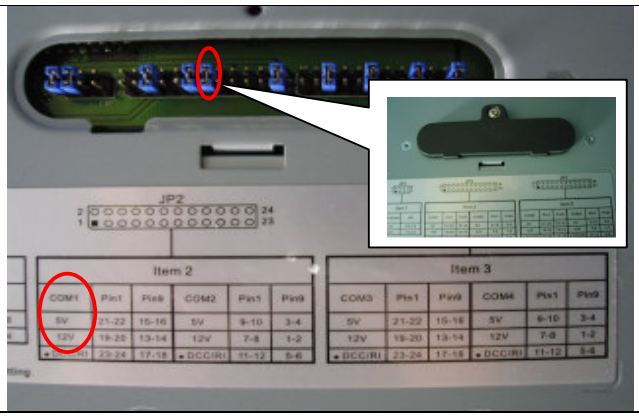
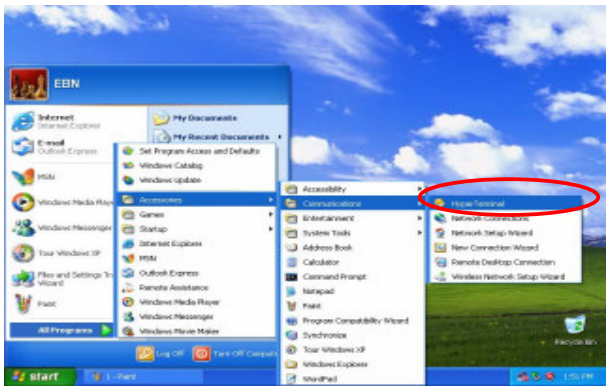
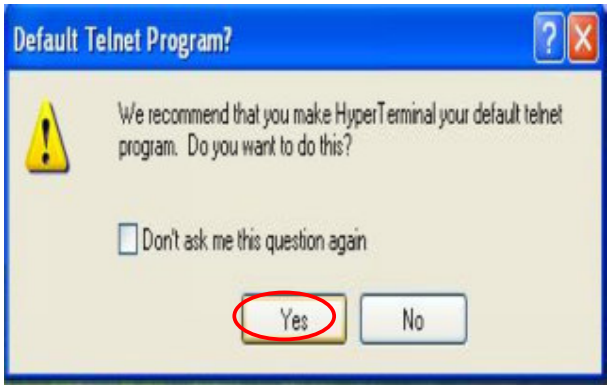
2.6 Accessories

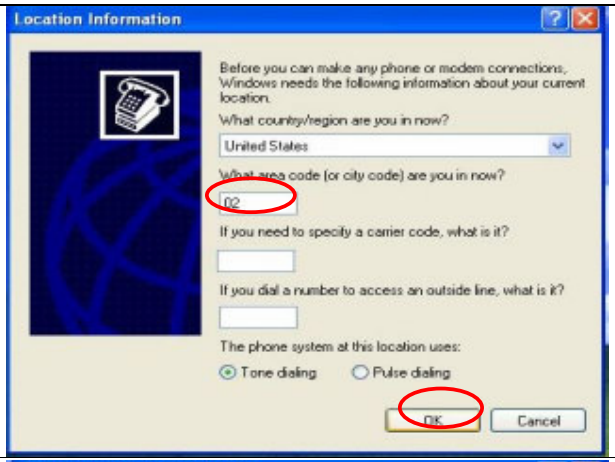
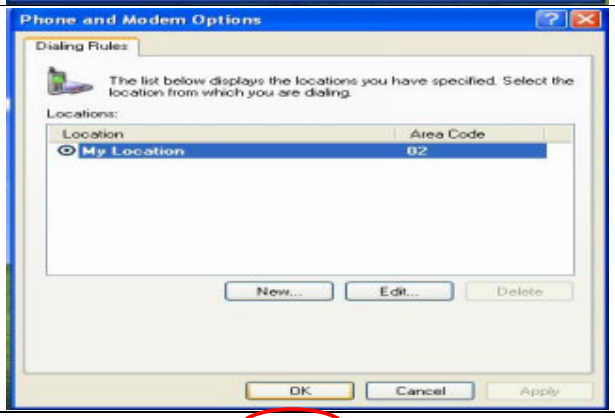
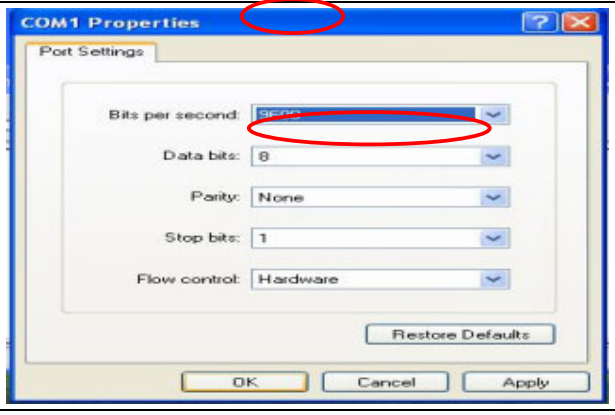
2.6.1 HDD

Item	Photo	Description
1		1. Follow 2.2.1 item 1 to 10 (Remove base housing) 2. Remove power cable 3. Remove HDD to M/B cable 4. Pull out HDD tray
2		1. Remove 2 screws from HDD left hand side 2. Remove 2 screws from HDD right hand side
3		1. Remove and replace with another HDD

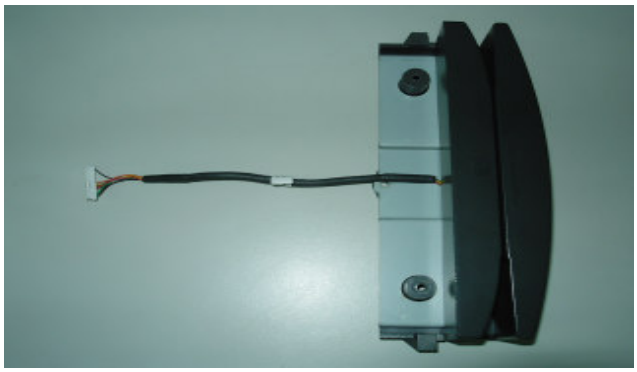
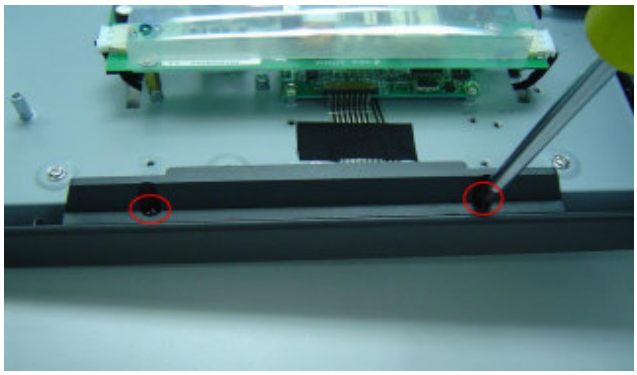
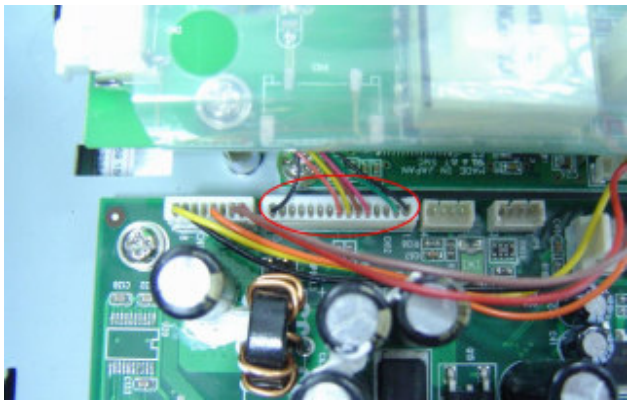
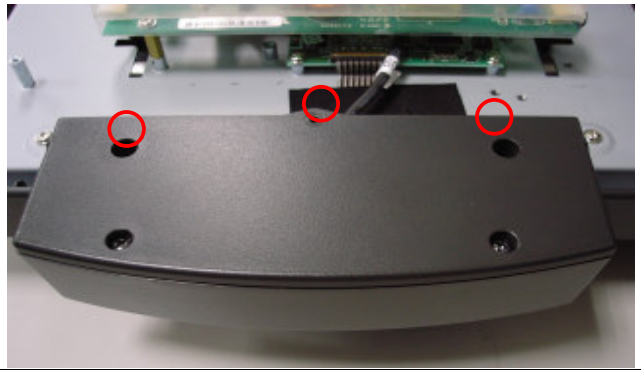
2.6.2 Pole Display

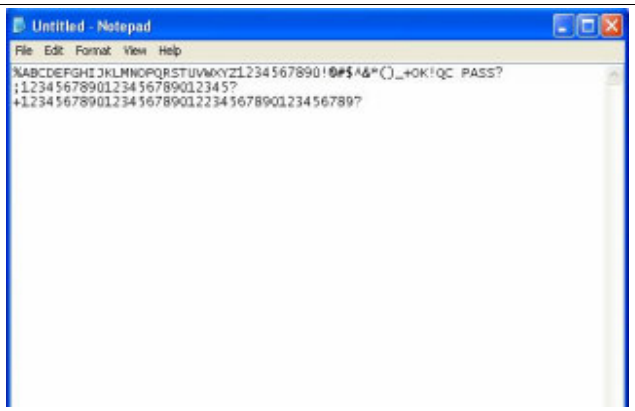
Item	Photo	Description
1		1. Packing List: a. Assembly（1）Tube and（2）VFD Unit
	H/W Installation	
1		1. Remove the customer display cover from rear base
2		1. Remove two screws marked in red
3		1. Install the VFD kit on rear base

Item	Photo	Description
4		1. Connect VFD cable to COM1 and screw up
5		1. Remove jumper cover, adjust Pin9 13-14 close for COM1 to be 12V
	Verification	
6		Verify the VFD through by Hyper Terminal as following procedure. Enter to "All Programs" → "Communication" → "Hyper Terminal"
7		1. Click "Yes" to continue

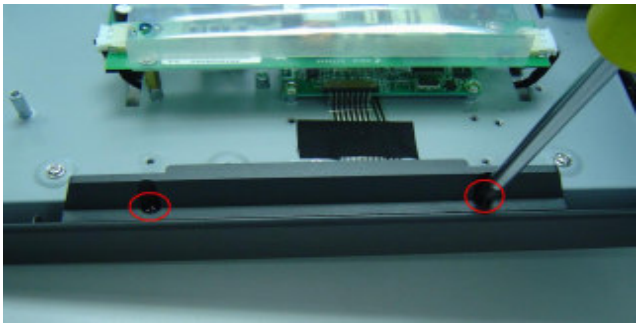
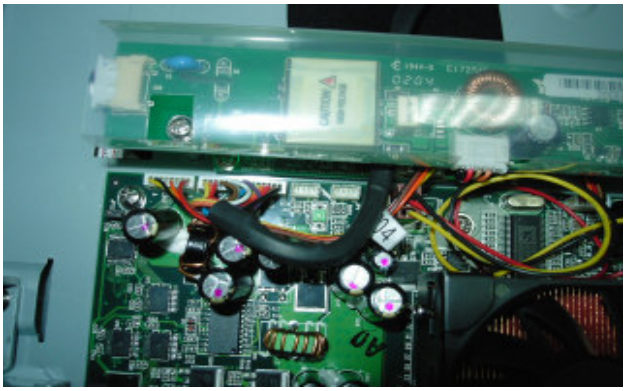
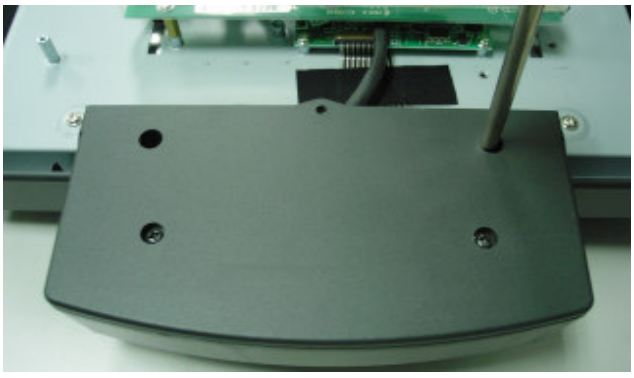
Item	Photo	Description
8		1. Set “area code” and click OK
9		1. Select on using COM1 port.
10		1. Set on Baud Rate to be 9600 bps.
11		1. Press random character from keyboard which will be shown on VFD

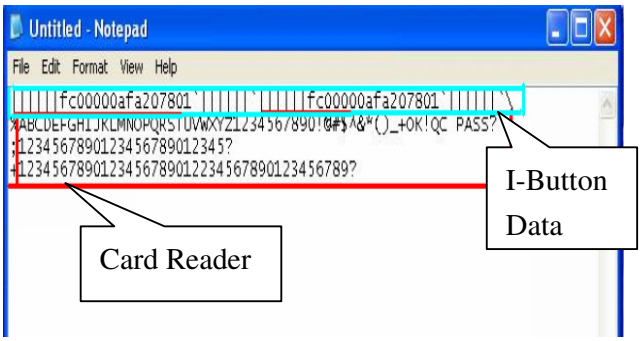
2.6.3 MSR

Item	Photo	Description
1		1. 3 tracks MSR module (PS2)
	H/W Installation	
1		1. Screw off the cover.
2		1. Pass through the MSR cable under the Inverter BD, connect to CN12 of M/B
3		1. Screw up the module to the slot.

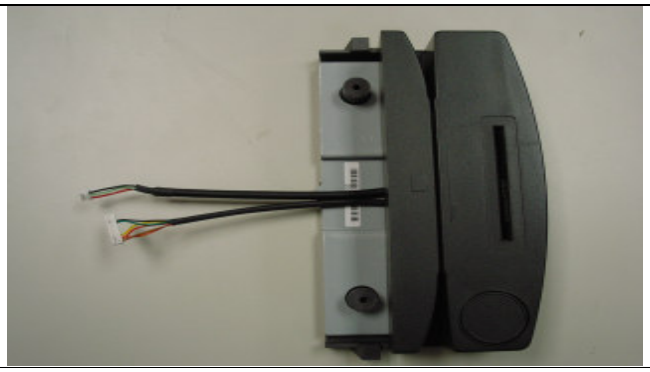
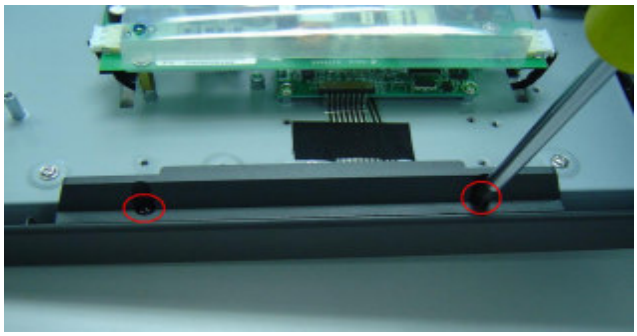
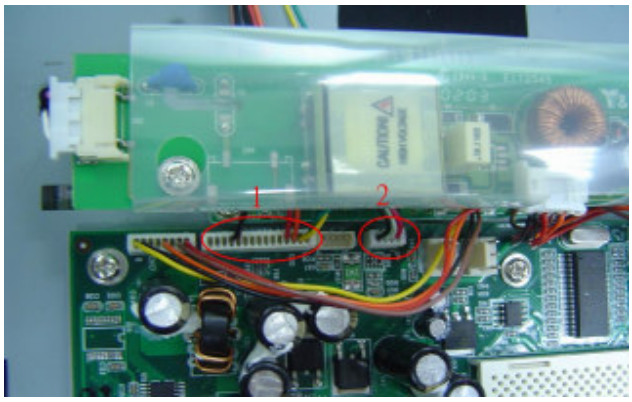
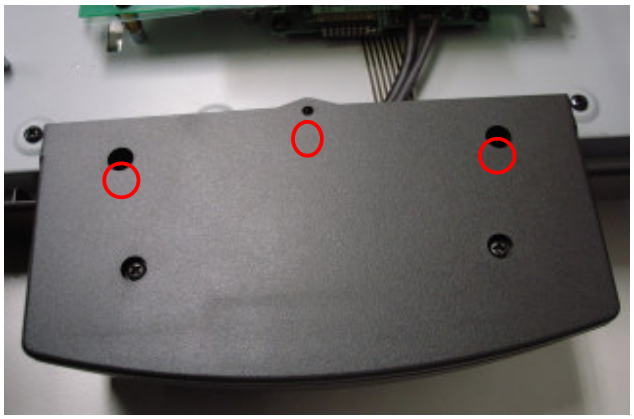
	Verification	
1		1. Enter to “Accessories” → “Notepad”
2		1. Stripe the MSR card to Reader and complete test OK.

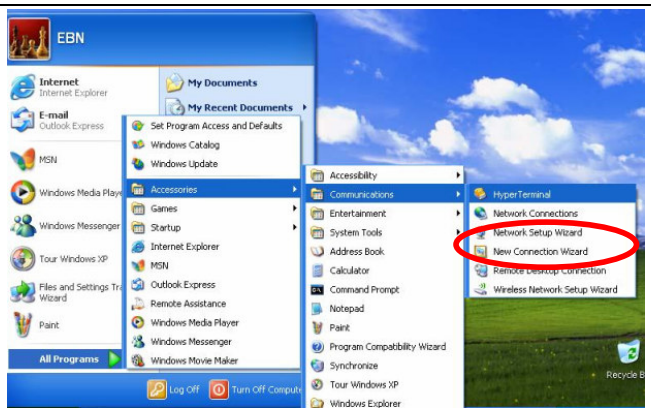
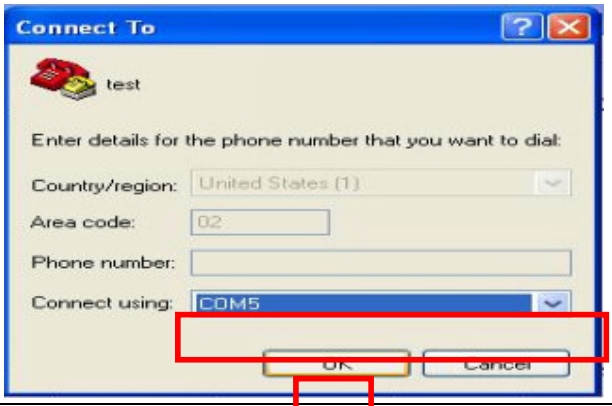
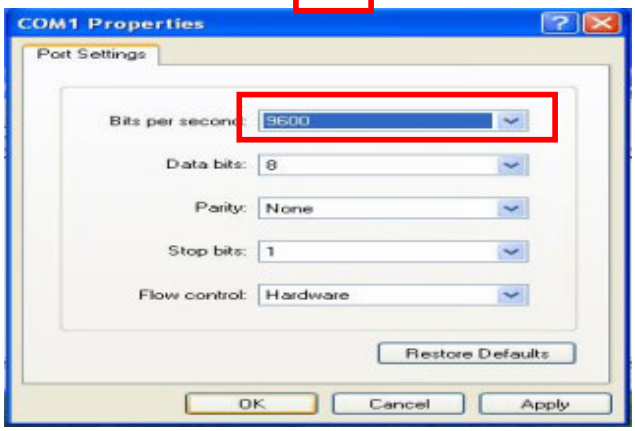
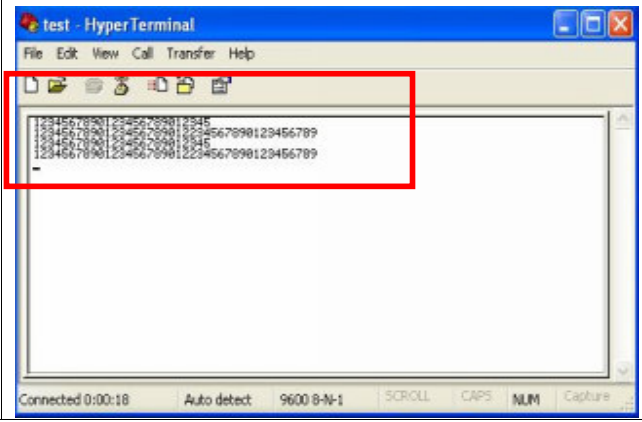
2.6.4 MSR+ I Button

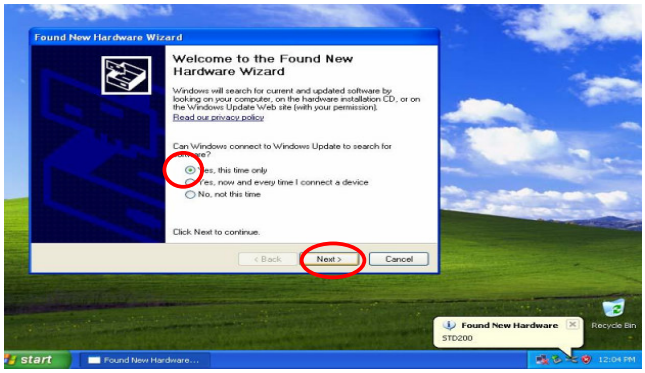
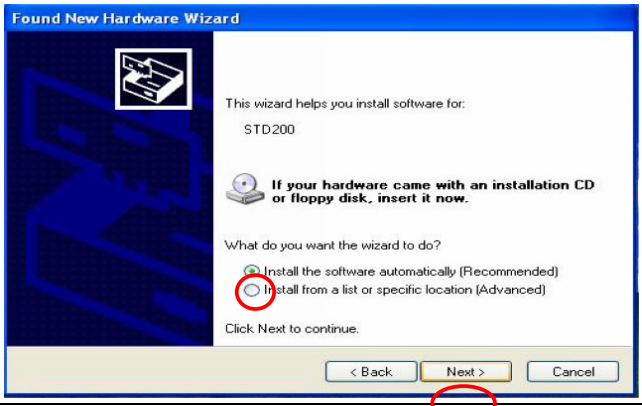
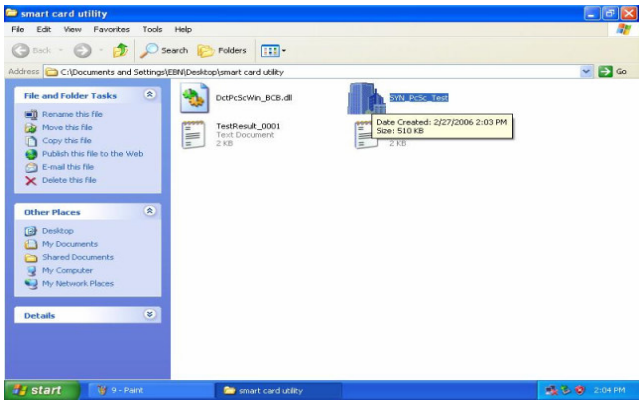
Item	Photo	Description
1		1. 3 tracks MSR module (PS2)
	H/W Installation	
1		1. Screw off the cover.
2		1. Pass through the MSR cable under the Inverter BD, connect to CN12 of M/B
3		1. Screw up the MSR to slot.

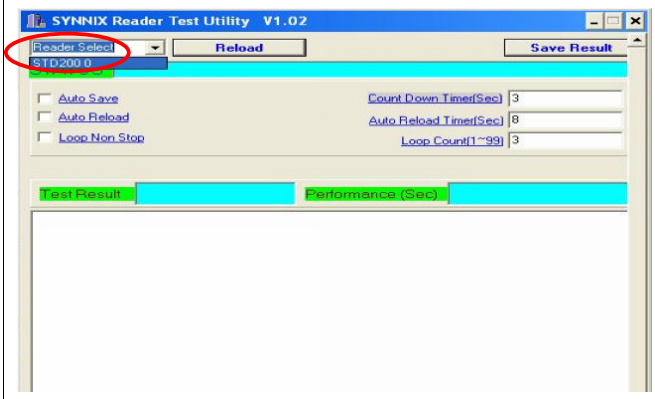
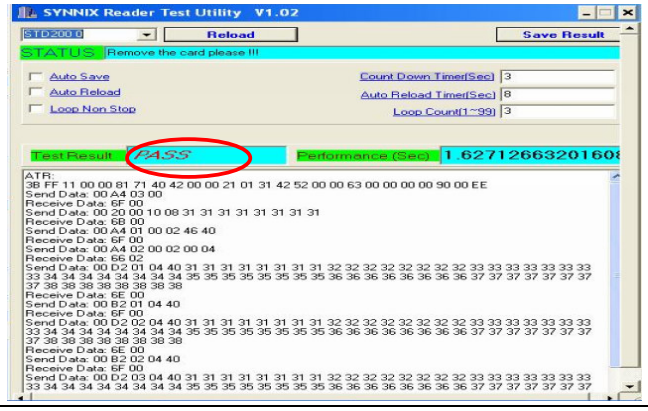
	Verification	
1		1. Enter to “Accessories” → “Notepad”
2		Complete test OK.

2.6.5 MSR+ Smart Card

Item	Photo	Description
1		1. MSR 3 tracks (Serial Port) + Smart Card Reader module (USB)
	H/W Installation	
1		1. Screw off the cover.
2		1. Pass through the cables under the Inverter BD, connect to COM cable to CN12 as red mark 1. Connect Smart cable to JP6 as red mark2.
3		1. Screw up the module to the slot

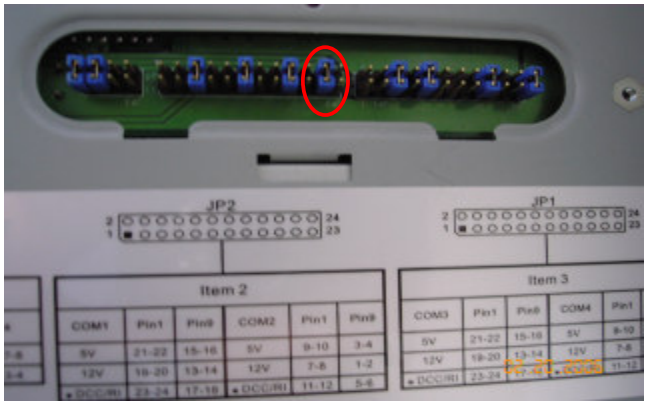
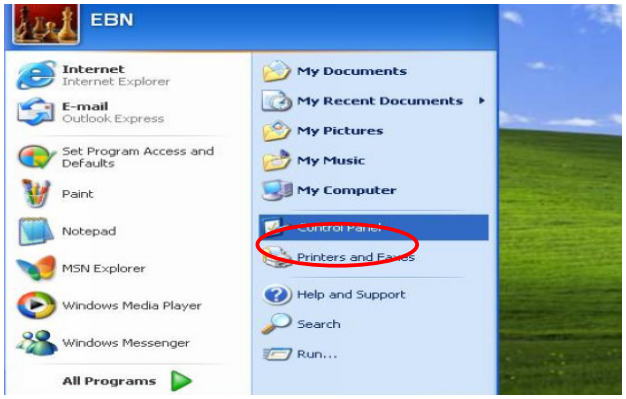
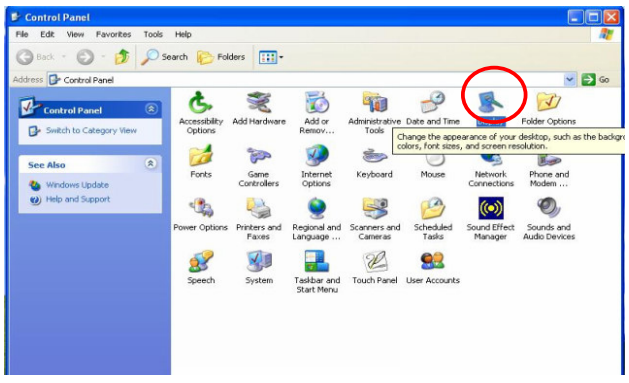
	Verification MSR	
1		1. 1. Enter to" All Programs" → "Communication" → "Hyper Terminal" 2. b. Set the configuration as same to VFD as above
2		1. Set on using COM5 port.
3		1. Set on Baud Rate to be 9600 bps.
4		1. Stripe the MSR card to Reader and complete test OK

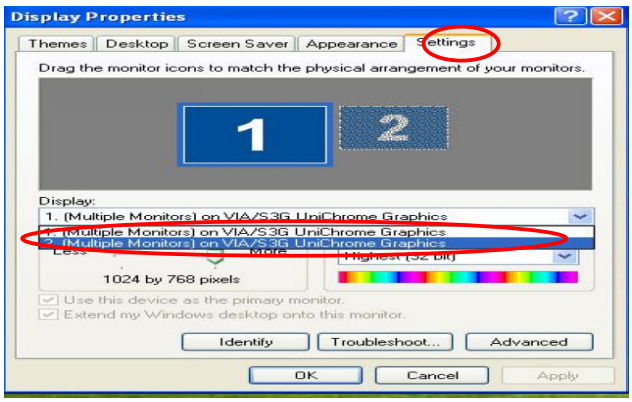
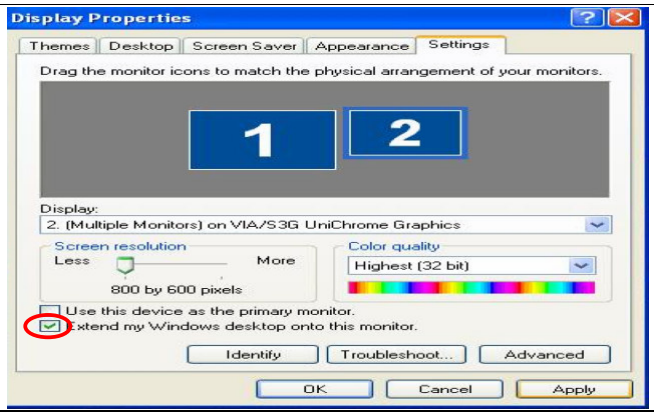
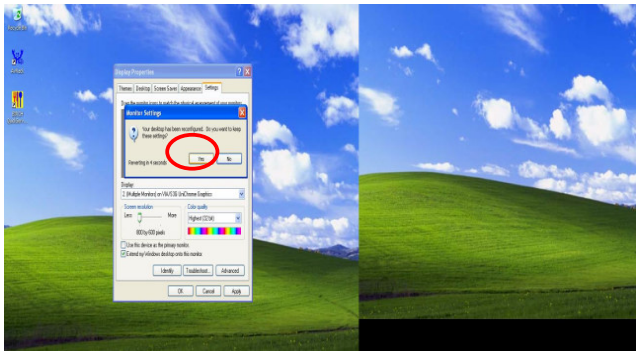
	Smart Card Driver Installation and Verification	
1		1. Select “Yes, this time only” and Click Next
2		1. Install the software automatically [Recommended] and Click Next
3		1. Click Finish for complete installation
4		1. Enter to Smart Card Utility → Select “SYN_PcSc_Test”

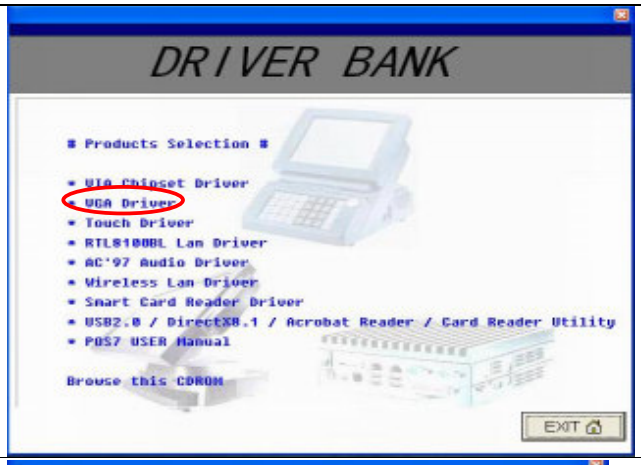
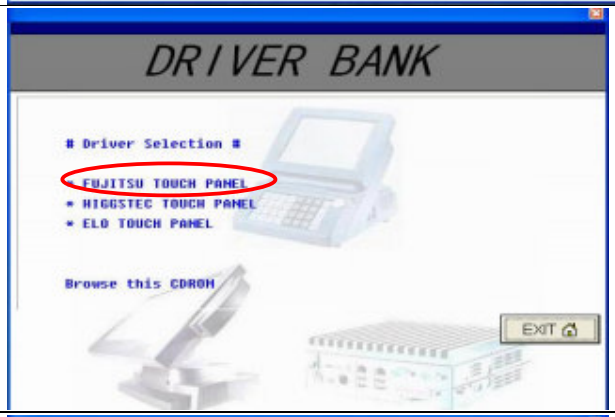
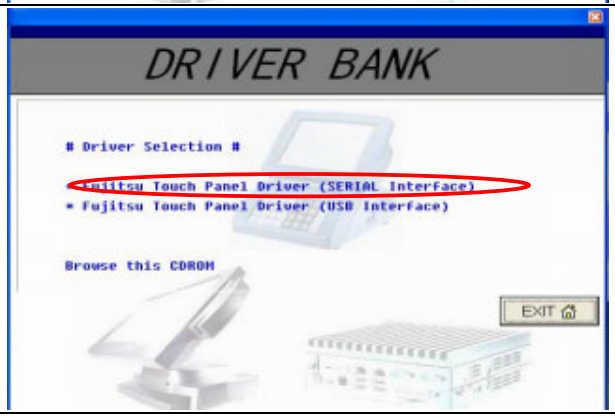
Item	Photo	Description
5		1. Select STD 200 0
6		1. Insert IC Card to slot
7		1. Show “PASS” complete test OK

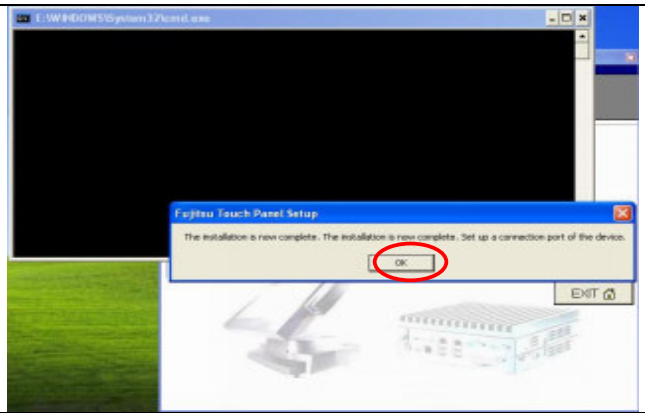
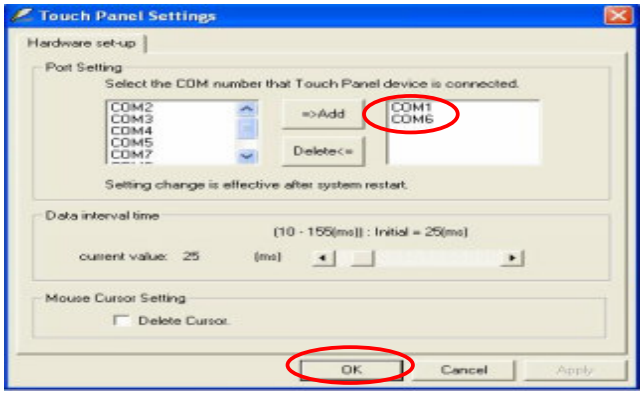
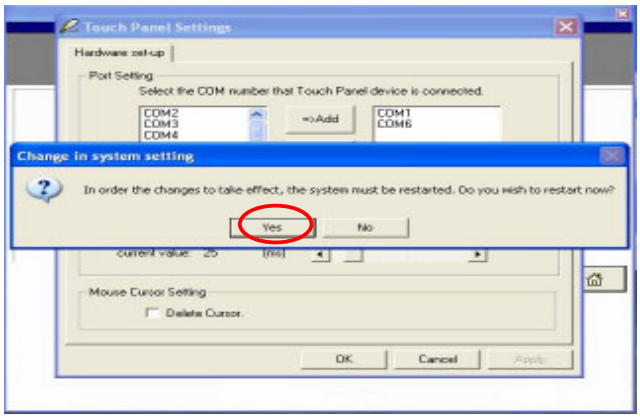
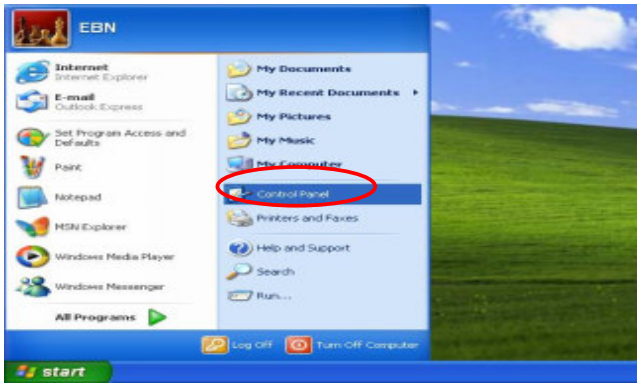
2.6.6 2nd Display W/ Touch

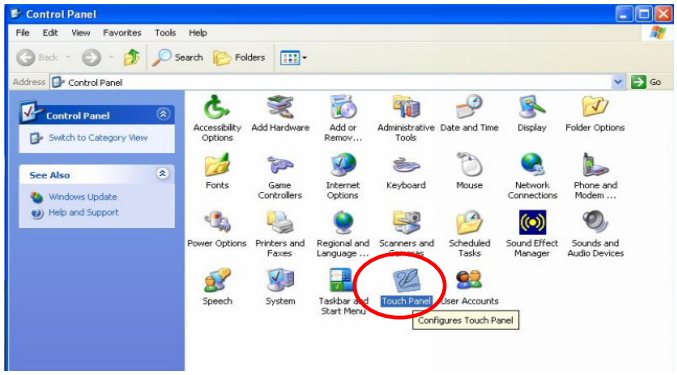
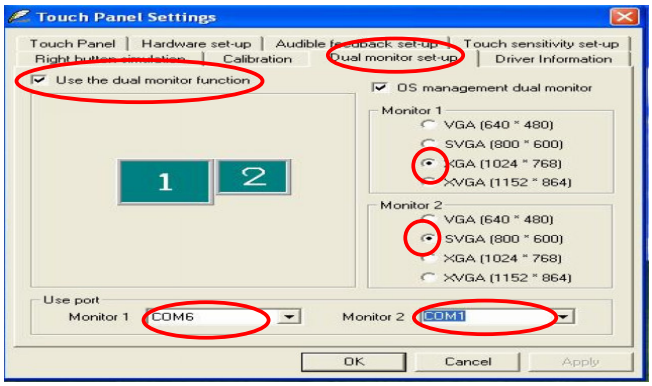
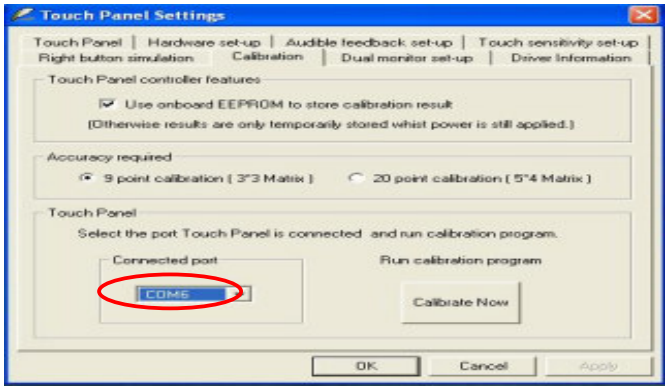
Item	Photo	Description
1	 	1. 12.1 / 15” display with Fujitsu Touch Panel 2. Cable 1: VGA with power pin I/P. Cable 2: Serial touch with power pin I/P.
	H/W Installation	
1		1. Screw off the two screws as red mark.
2		1. Install the second display unit with POS70

Item	Photo	Description
3		1. Fasten the 2nd display with 6 screws as red mark. Connect cable 1 to VGA port and cable 2 to COM1
4		1. Remove the jumper cover, adjust Pin1 21-22 close for COM1 to be 5V
	Driver Installation and Verification	
1		Driver Installation and Verification 1. Display Setup 2. Enter to “Control Panel”
2		1. Click “Display” icon

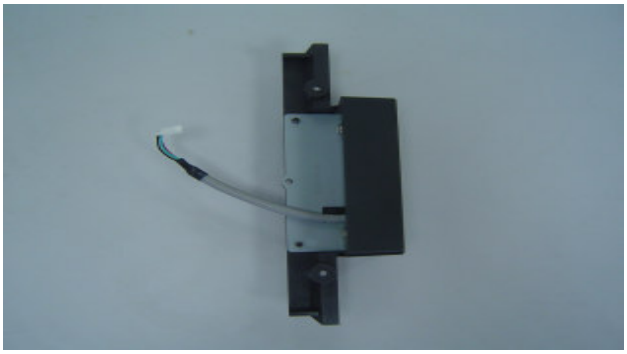
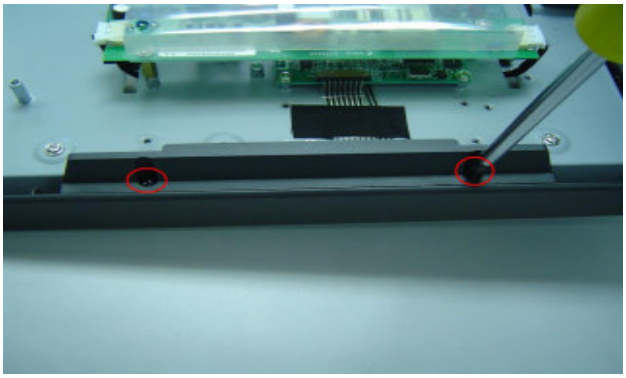
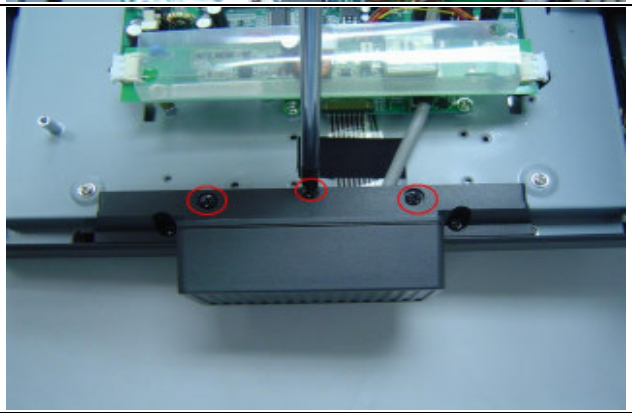
Item	Photo	Description
3		1. Set main display by “Settings” to 2.[Multiple Monitors]…
4		1. Select “Extend my Windows Desktop onto this monitor on VIA/S3G.
5		1. Click “Yes” for save the settings. The 2nd display was shown out the extend the screen
	Install Touch Driver	
1		1. Insert the Driver Bank disc to CD ROM→Select “POS7 Series”

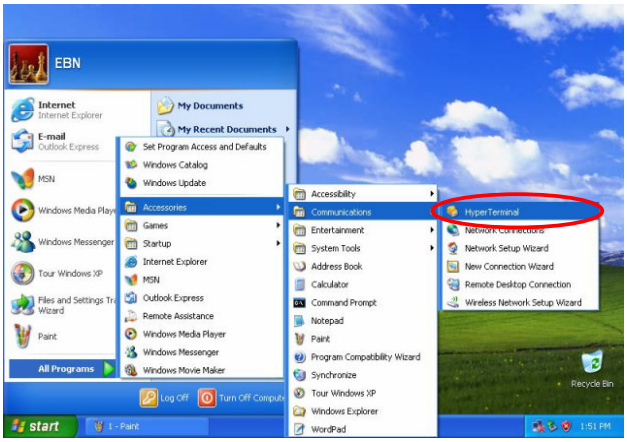
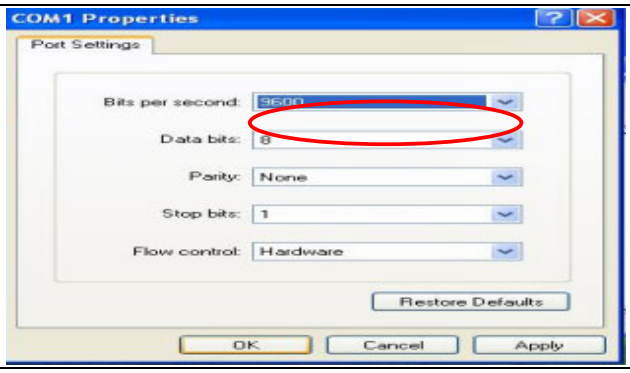
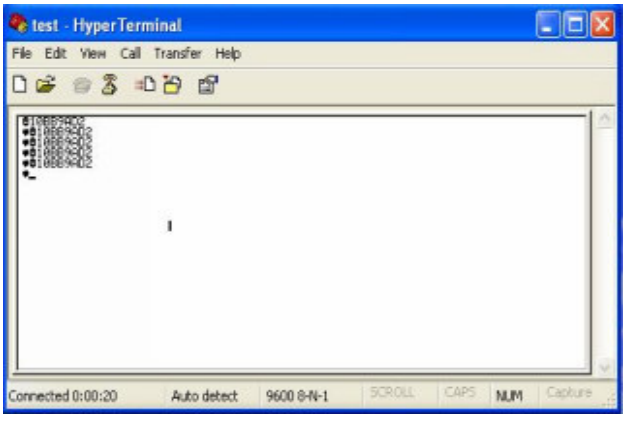
Item	Photo	Description
2		1. Select “Touch Driver”
3		1. Select “FUJITSU TOUCH PANEL”
4		1. Select “Fujitsu Touch Panel Driver (SERIAL Interface)”
5		1. Select “Non Plug and Play Device” and click OK

Item	Photo	Description
6		1. Click OK for completed installation
7		1. Select dual port for touch by COM1 and COM6
8		1. Completed installation →Click “Yes” for restart system
9		1. Enter to “Control Panel”

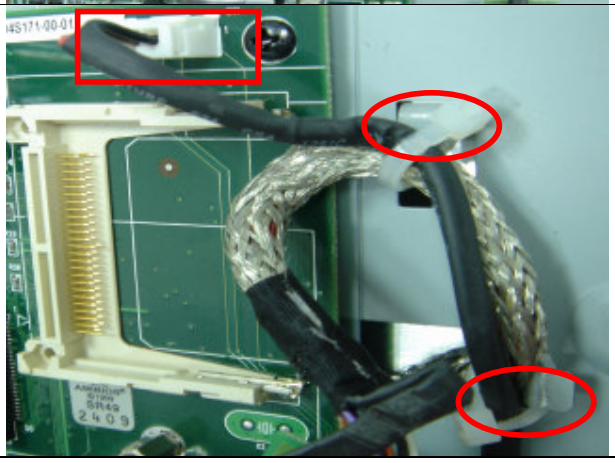
Item	Photo	Description
10		1. Click “Touch Panel” icon
11		1. Select Dual monitor set-up
12		1. Select “Calibration” → Connected port COM1 & COM6

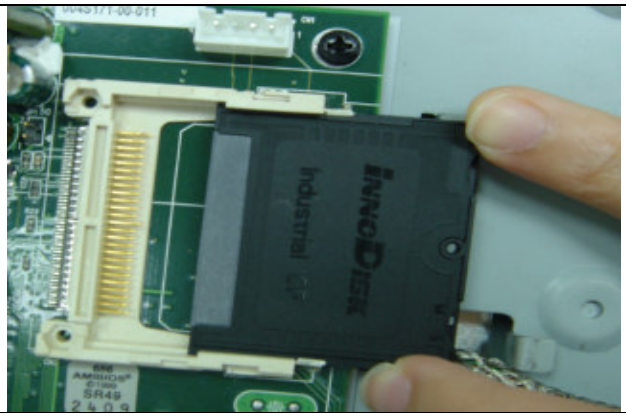
2.6.7 RFID

Item	Photo	Description
1		1. RFID module (Serial I/F)
	H/W Installation	
1		1. Screw off the cover.
2		1. Pass through the RFID cable under the Inverter BD, connect to CN12 of M/B
3		1. Screw up the RFID on the slot.

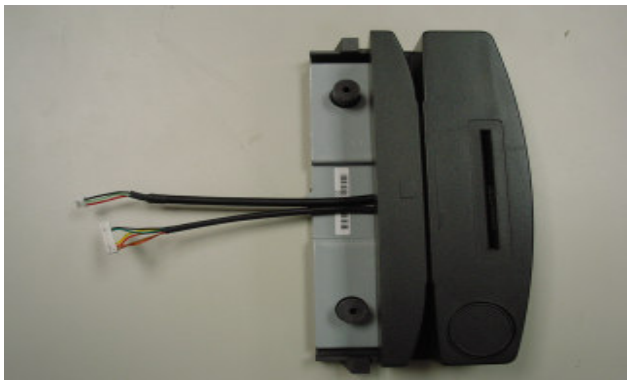
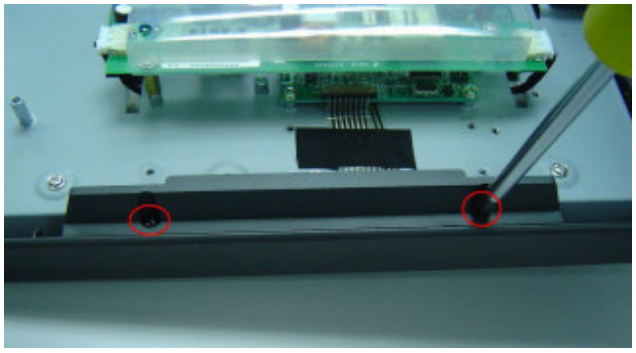
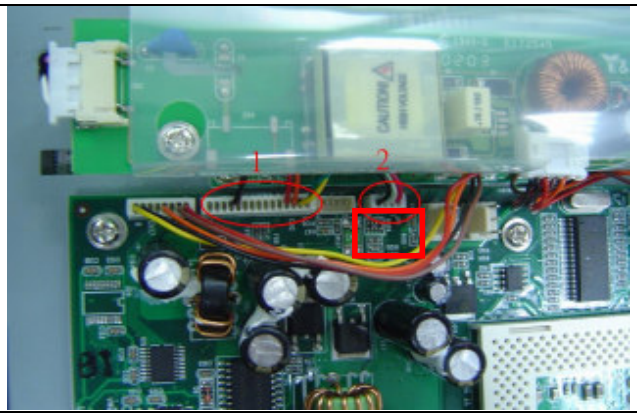
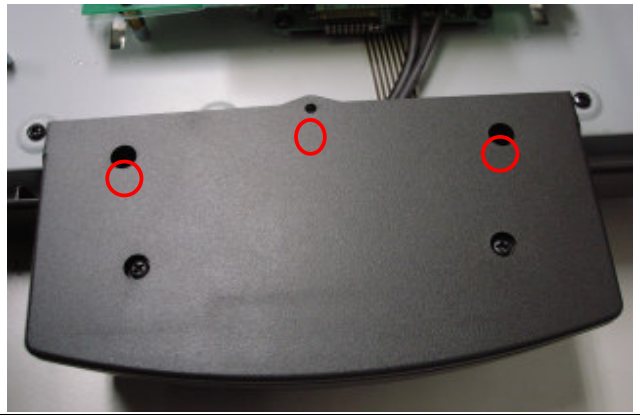
	Verification	
1		1. Enter to" All Programs" → "Communication" → "Hyper Terminal" 2. Set the configuration as same VFD as above
2		1. Set on using COM5 port.
3		1. Set on Baud Rate to be 9600 bps.
4		1. Attach the RFID card to Reader, completed test OK

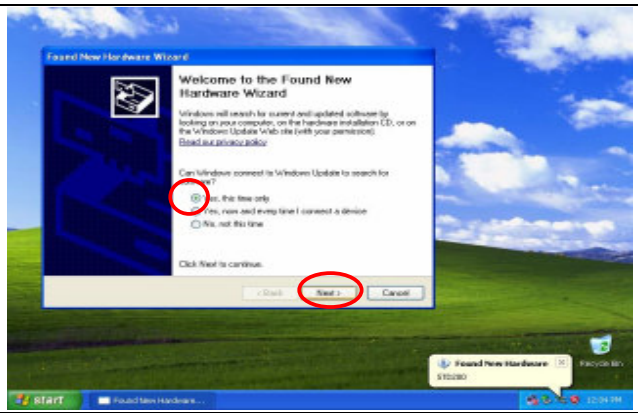
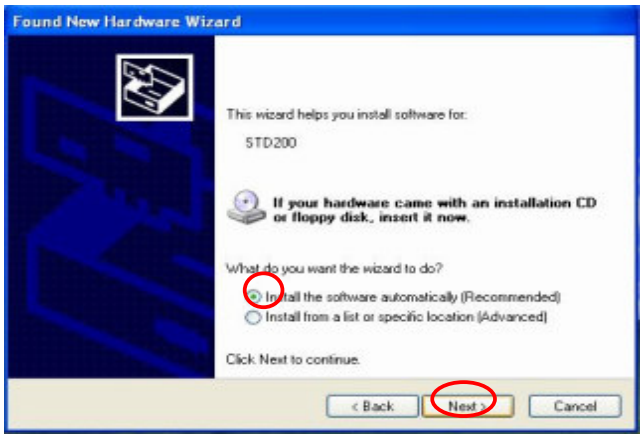
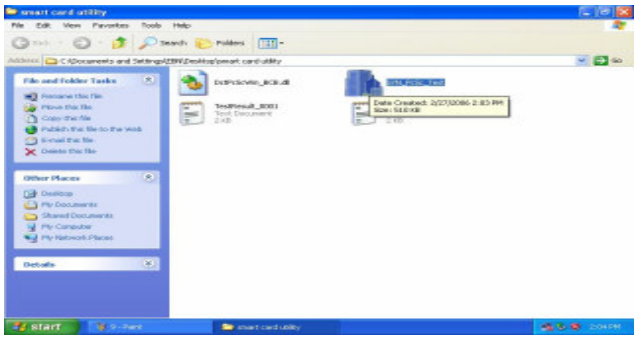
2.6.8 Compact Flash

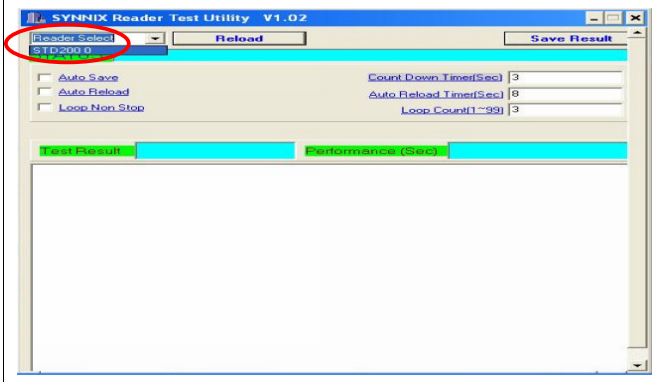
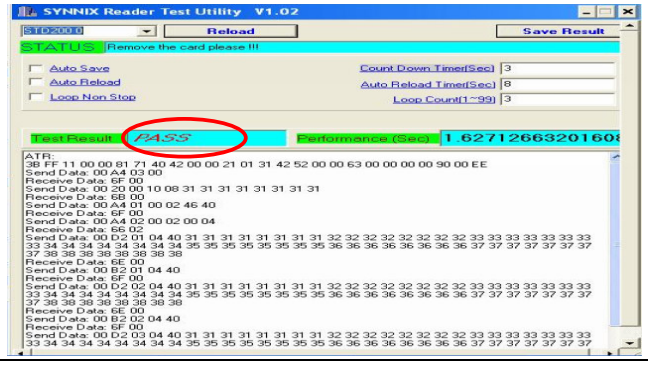
Item	Photo	Description
1		1. Compact Flash
2		1. Use screw driver to open upper case 2. Remove 2 screws
3		1. Remove 2 screws on bridge board
4		1. Take off plastic strings from the hook 2. Remove bottom cable

Item	Photo	Description
5		1. Put compact flash on socket

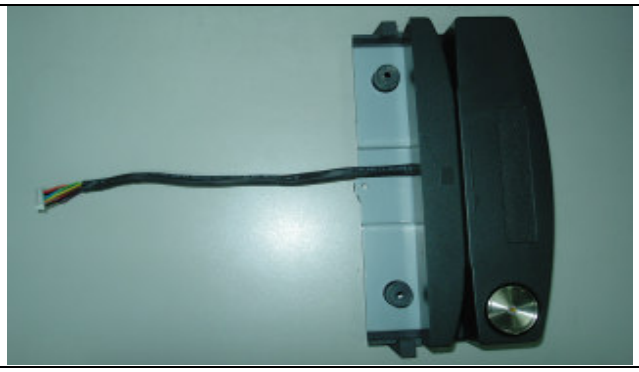
2.6.9 Smart Card

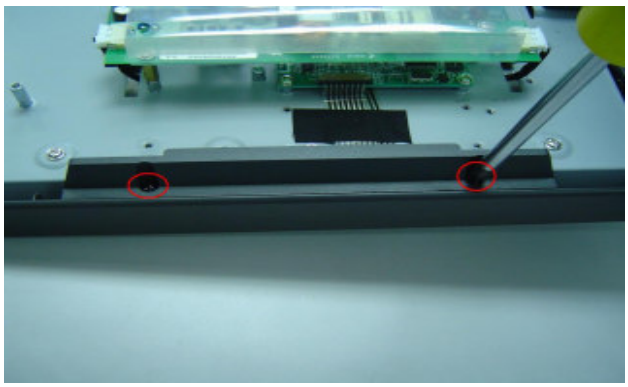
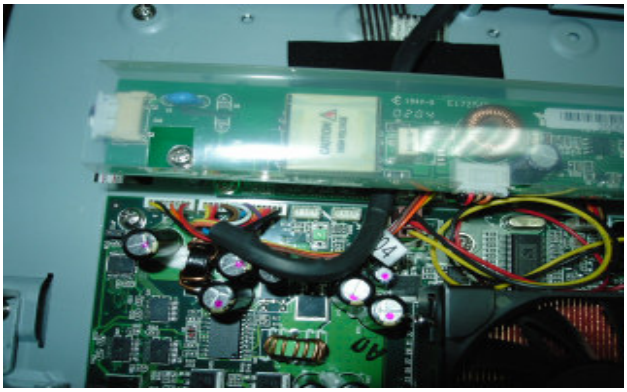
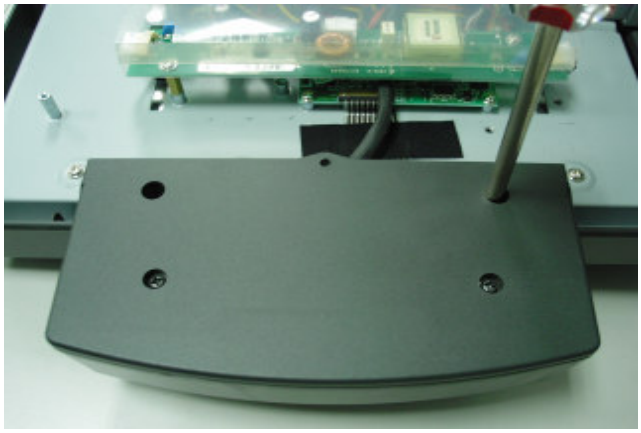
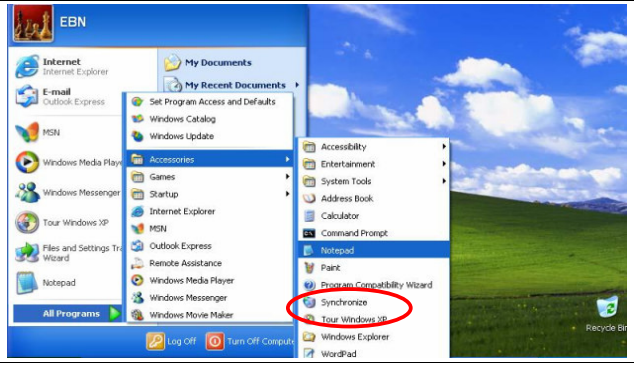
Item	Photo	Description
1		1. MSR 3 tracks (Serial Port) + Smart Card Reader module (USB)
	H/W Installation	
1		1. Screw off the cover.
2		1. Pass through the cables under the Inverter BD. Connect Smart cable to JP6 as red mark
3		1. Screw up the module to the slot

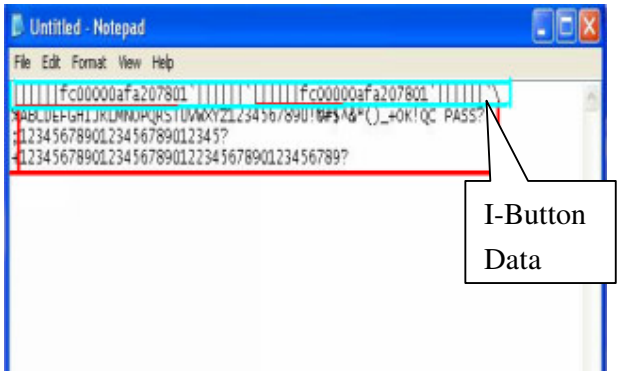
	Smart Card Driver Installation and Verification	
1		3. Select “Yes, this time only” and Click Next
2		4. Install the software automatically [Recommended] and Click Next
3		5. Click Finish for complete installation
4		6. Enter to Smart Card Utility → Select “SYN_PcSc_Test”

Item	Photo	Description
5		7. Select STD 200 0
6		8. Insert IC Card to slot
7		9. Show “PASS” complete test OK

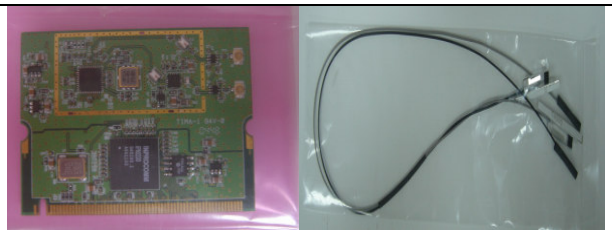
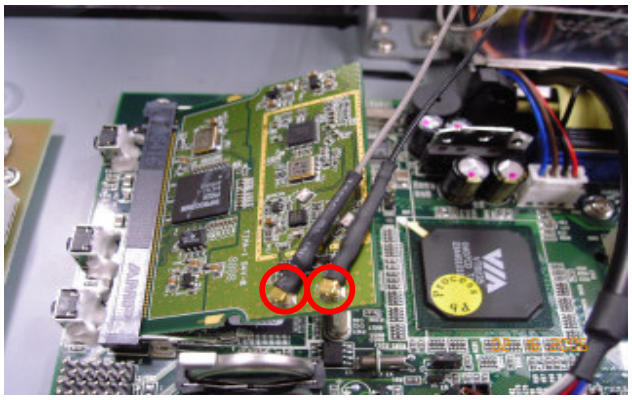
2.6.10 I Button

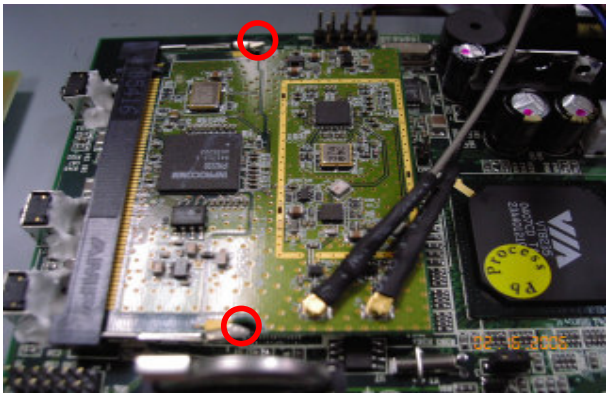
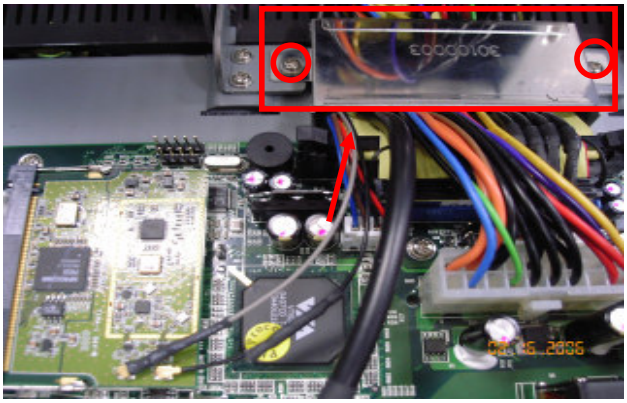
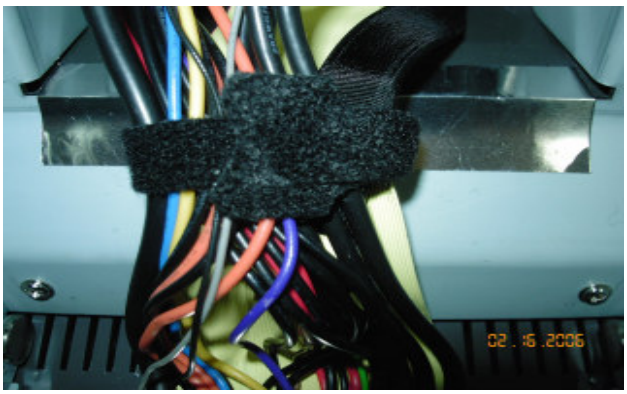
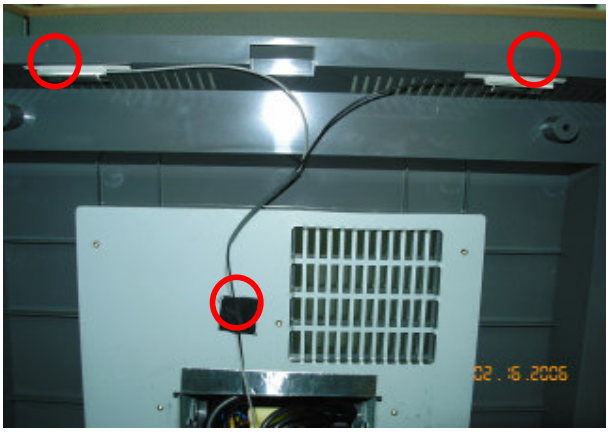
Item	Photo	Description
1		1. PS2-I button module kit

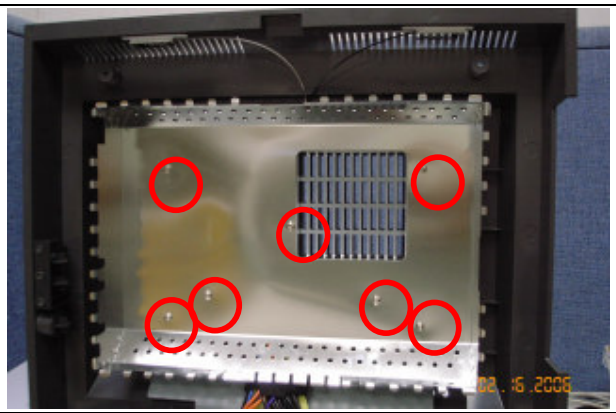
	H/W Installation	
1		1. Screw off the cover.
2		1. Pass through the I-button under the Inverter BD, connect to CN12 of M/B
3		1. Screw up the MSR to slot.
	Verification	
1		1. Enter to “Accessories” → “Notepad”

Item	Photo	Description
2		Complete test OK.

2.6.11 Mini PCI Wireless LAN

Item	Photo	Description
1		Mini PCI Wireless LAN
2		1. Use screw driver to open upper case 2. Remove 2 screws
3		1. Insert the WLAN card to mini PCI slot 2. Connect the Antenna to card as red mark

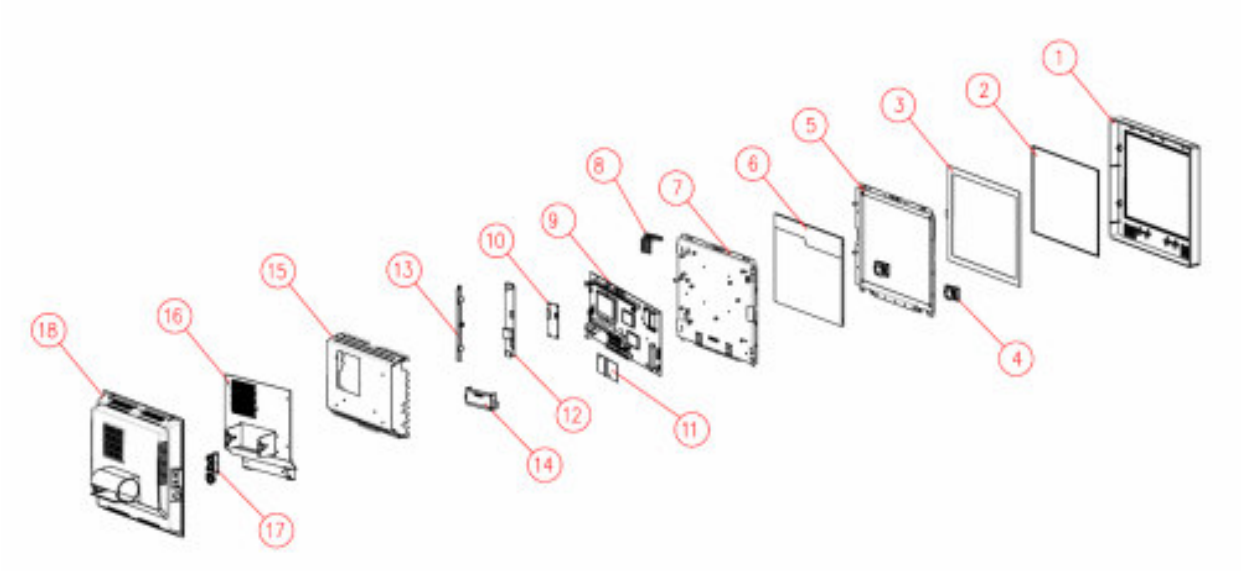
Item	Photo	Description
4		1. Press Wireless LAN Card 2. Make sure connected well
5		1. Remove 2 screws from cover bracket 2. Remove cover bracket 3. Antenna cable needs to go under cover bracket 4. Remove EMI cover
6		1. Tied Antenna cable with other cables
7		1. Stick the Antenna by temped tape to back cover

Item	Photo	Description
8		1. Tighten 7 screws on EMI cover.

3 Chapter 3 : Spare parts list

3.1 Main Unit

3.1.1 Explode of Main Unit



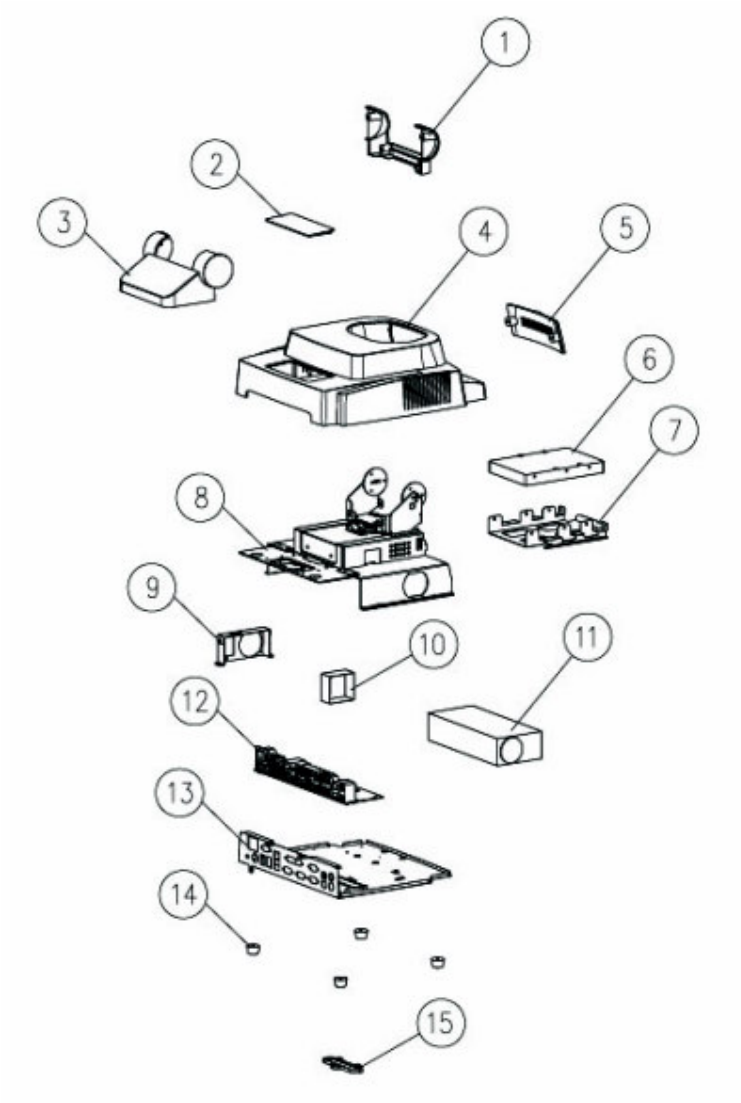
3.1.2 Main Unit Parts list & quotation

Item	Parts No.	Description	Q'ty	Price (US$)
1+2	10500004RH	15.0" Bezel PC+ABS 1CAV	1	Call Sales
		@Rubber Black +T4000, 310*2.4*1.5T	2	
		@Rubber Black +T4000, 238*2.4*1.5T	2	
1+2	10500025RH	12.1" Bezel PC+ABS 1CAV	1	Call Sales
		@ Rubber Black +T4000, 252*1.8*1T	2	
		@ Rubber Black +T4000, 195*1.8*1T	2	
3+5	A10400288RH	Fujitsu 15.0"touch panel N010-0510-T237	1	Call Sales
		Touch Screen Holder- 15.0"	1	
		@SPONG FOR POS70－15.0 312*5*1	2	
		@SPONG FOR POS70－15.0 245*5*1	2	
3+5	A10400582RH	Fujitsu 12.1"touch panel	1	Call Sales
		Touch Screen Holder-12.1" w/ Sponge	1	
4	10500003RH	Square Speaker(Left and Right)	1	Call Sales
		Speaker Cable	1	

Item	Parts No.	Description	Q'ty	Price (US$)
6	21100014RH	LCD, AUO 15" 1024 x 768, 350nits	1	Call Sales
6	21100001RH	LCD, LG 12'1, 800*600, 300nits	1	Call Sales
7	30100017RH	LCD Chassis-15.0(AUO)	1	Call Sales
7	30100010RH	LCD Chassis-12.0 (LG)	1	Call Sales
8	30200007RH	LED Lens, transparent	1	Call Sales
9	10100001RH	Main Board, EBN-370-RH	1	Call Sales
10	10100004RH	FUJITSU Touch Panel Control Board:N16B-0558-B280	1	Call Sales
11	10100007RH	Bridge Board-TTL, 18Bit+TTL (12.1", LG LCD)	1	Call Sales
11	10100006RH	Bridge Board-LVDS, 24Bit (15", AUO LCD)	1	Call Sales
12	22400012RH	Inverter: 12.1/15.0", 8mA, RI1205-06G	1	Call Sales
13	30200015RH	LCD BASE Cover, ABS, Black	1	Call Sales
14	30100003RH	Cable Cover Bracket , 0.3T	1	Call Sales
15	30100120RH	EMI Chassis	1	Call Sales
16+17+18	10500005RH	LCD Hinge Assembly	1	Call Sales
		Key Pad	1	
		15" LCD Base	1	
16+17+18	10500006RH	LCD Hinge Assembly	1	Call Sales
		Key Pad	1	
		12.1" LCD Base	1	

3.2 Base Unit

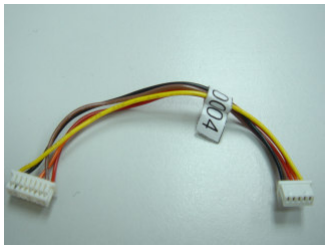
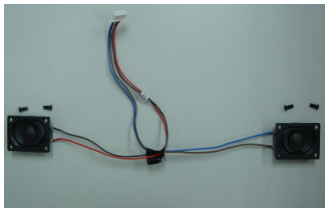
3.2.1 Explode of Base Unit

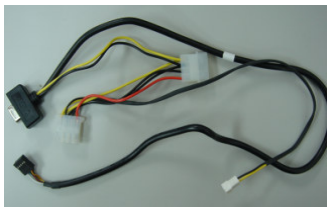
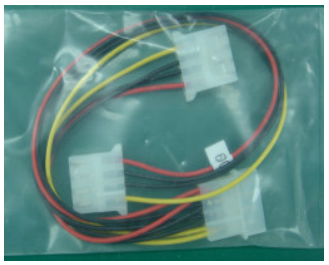


3.2.2 Base Unit Parts list & quotation

Item	Parts No.	Description	Q'ty	Price (US$)
1	10500002RH	Swivel Front Cover, Black Sub-ASSY	1	Call Sales
2	30200009RH	KIT Cover	1	Call Sales
3	10500001RH	Swivel Rear Cover, Black Sub-ASSY	1	Call Sales
4	30200003RH	Base Housing,PC+ABS,Black	1	Call Sales
5	30200013RH	HDD Cover	1	Call Sales
7	30100006RH	HDD Tray	1	Call Sales
8	10200004RH	15"/12.1" Swivel Hinge Assembly	1	Call Sales
9+10+ 11	A10400216RH	Power Supply Module: 1U, 220W, W/PFC	1	Call Sales
12	10100002RH	I/O Board	1	Call Sales
13	30100002RH	Base Chassis	1	Call Sales
14	30500024RH	Plastic Foot	4	Call Sales
15	30200016RH	Jumper Cover	1	Call Sales

3.3 Cables

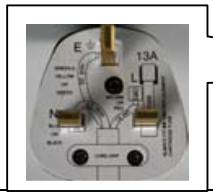
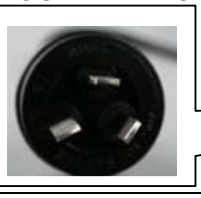
Part No.	Description	Photos	Price
21600003RH	Cable, M/B To Inverter		Call Sales
21600004RH	Cable, M/B To Touch Control Board		Call Sales
21600006RH	Cable, M/B To Speaker		Call Sales

Part No.	Description	Photos	Price (US$)
21600007RH	Cable, M/B To I/O BD 100P		Call Sales
21600008RH	Cable, M/B To HDD 80P		Call Sales
21600009RH	Cable, 2nd VGA to I/O board 10 pin transfer to D-SUB 15 pins		Call Sales
21600016RH	Cable, M/B To I/O BD 20P USB		Call Sales
21600088RH	POS-70 IDE Y CABLE		Call Sales
21600089RH	POS-70 HDD POWER Y CABLE		Call Sales

Part No.	Description	Photos	Price (US$)
21600002RH	Cable for 24V Printer		Call Sales

3.4 Accessories

3.4.1 Power Cord

Part No.	Description	Photos	Price (US$)
20700001RH	POWER CORE FOR USA		Call Sales
20700005RH	POWER CORD FOR UK 		Call Sales
20700002RH	POWER CORD FOR EUR		Call Sales
20700004RH	POWER CORD FOR Australia 		Call Sales

3.4.2 HDD

Part No.	Description	Photos	Price (US$)
20200009RH	SEAGATE 5400RPM-40G HDD ULTRA ATA/100 ST340015A		Call Sales
20200006RH	80G HDD WD 7200RPM		Call Sales

3.4.3 Pole Display

Part No.	Description	Photos	Price (US$)

A10400265RH	VFD Type		Call Sales
A10400264RH	LCD Type		Call Sales

3.4.4 MSR

Part No.	Description	Photos	Price (US$)
A10400010RH	2 Track : PS2		Call Sales
A10400023RH	2 Track : RS232		Call Sales
A10400009RH	3 Track : PS2		Call Sales
A10400024RH	3 Track : RS232		Call Sales

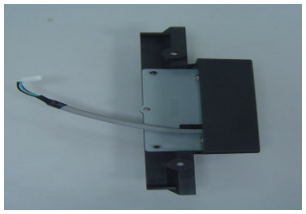
3.4.5 2nd Display

Part No.	Description	Photos	Price (US$)
A10400022RH	12” TFT LCD(w/o Touch)		Call Sales
A10400004RH	15” TFT LCD(w/o Touch)		Call Sales
A10400062RH	12” TFT LCD(w/ Touch)	NA	Call Sales
A10400107RH	15” TFT LCD(w/ Touch)	NA	Call Sales

3.4.6 OS

Part No.	Description	Price (US$)
20900003RH	Win2000 Professional Edition	Call Sales
20900001RH	WinXP Professional Edition	Call Sales
20900008RH	Microsoft XP Home SP2, Chinese Ver.	Call Sales
20900002RH	WEPOS, English Ver.	Call Sales

3.4.7 RFID

Part No.	Description	Photos	Price (US$)
A10400005RH	RFID		Call Sales

3.4.8 Compact Flash

Part No.	Description	Photos	Price (US$)
20600001RH	Compact Flash 128MB		Call Sales
20600002RH	Compact Flash 256MB		Call Sales
20600003RH	Compact Flash 512MB		Call Sales
20600005RH	Compact Flash 1G		Call Sales

3.4.9 Memory

Part No.	Description	Price (US$)
20300001RH	Memory: 128MB	Call Sales
20300002RH	Memory: 256MB	Call Sales
20300003RH	Memory: 512MB	Call Sales
20300004RH	Memory: 1G	Call Sales

3.4.10 Smart Card +MSR 3T RS232

Part No.	Description	Photos	Price (US$)
A10400104RH	Smart Card +MSR 3T RS232		Call Sales

3.4.11 I Button +MSR 2T KB

Part No.	Description	Photos	Price (US$)
A10400121RH	I Button +MSR 2T KB		Call Sales

3.4.12 Wireless LAN

Part No.	Description	Photos	Price (US$)
30400001RH	ANTENNA 35B/L+R		Call Sales
10100029RH	WIRELESS LAN 11g MINI PCI MODULE		Call Sales